



**CLASS 8 Mathematics (GANITA PRAKASH PART-I And II) – CG's Aligned Monthly Split-up Syllabus (April 2026–March 2027) + Portion Boundaries + Exams**  
**(For CM SoE)**  
**Developed by:- Jharkhand Council Of Educational Research & Training (Curriculum Division)**

| Teaching Days (Available) | NCERT Chapter Titles  | Sub-topics / Portion Boundary  | CGs (*CG Mapping - IDs) (NCERT Middle Stage NCF-2023)              | Practicals / Activities (Minimum)   | Assessment / Exams  |
|---------------------------|---|--|--|---|---|
| Apr2026<br>23             | Grade 8 Part -1<br><b>Chapter- 1</b><br>A Square and A Cube<br><br><b>Chapter- 2</b><br>Power play                    | 1.1 Square Numbers,<br>1.2 Cubic Numbers ,<br>1.3-A pinch Of History,<br>2.1 Experiencing the Power Play,<br>2.2 Exponential Notation and Operations,<br>2.3 The Other Side Of Powers,<br>2.4 Power Of 10,<br>2.5 Did You Ever Wonder<br>2.6 A Pinch Of History  | <b>CG -9</b> C-9.1<br>CG-1 C-1.1 ,C-1.2<br><b>CG-7</b> C-7.1       | <b>Activity-1</b> Square Pairs Page no.18,<br><b>Activity -2</b> Tremendous in Ten! Page no - 47  | April portion tested in Project RAIL on 05-05-2026 .                            |
| May 2026<br>14            | Grade 8 Part -1<br><b>Chapter -3</b><br>A Story of numbers.   | 3.1 Reema's Curiosity,<br>3.2 Some Early Number Systems .<br>3.3 The Idea Of a Base<br>3.4 Place Value Representation ,  | <b>CG-8</b> C-8.2 <b>CG-9</b> C-9.1                                | <b>Activity -1</b> Make a chart of the World's different Number System( The Hindu Number System, The Roman Number system, The Egyptian Number System, Mayan Number System, Chinese Number System) | May portion tested in Project RAIL on 16-06-2026 .                              |
| Jun 2026<br>12            | Grade 8 Part -1<br><b>Chapter-4</b><br>Quadrilaterals   | 4.1 Rectangles and Squares,<br>4.2 Angles in a Quadrilateral,<br>4.3 More Quadrilaterals with Parallel Opposite sides<br>4.4 Quadrilaterals with Equal Sidelengths,<br>4.5 Playing with Quadrilaterals, 4.6 Kite and Trapezium.  | CG-3 C-3.2 ,C-3.4  | <b>Activity-1</b> Which Quad? Page no. 111.   | June portion tested in Project RAIL on 07-07-2026 .                             |
| Jul 2026<br>14            | Grade 8 Part -1<br><b>Chapter -5</b> Number Play  | 5.1 Is This a Multiple Of?, 5.2 Checking divisibility quickly, 5.3 Digits in Disguise.   | CG 2 C-2.1, C-2.2,C-2.4, C-2.5                                     | <b>Activity-1</b> Navakankari page no. 135  | July portion tested in Project RAIL on 04-08-2026 .                             |
| Aug 2026<br>12            | Grade 8 Part -1<br><b>Chapter-6</b> We Distribute, Yet Things Multiply,<br><b>Chapter-7</b> Proportional Reasoning -1 | 6.1 Some properties of multiplication, 6.2 Special Cases of the Distributive Property, 6.3 Mind the Mistake, Mend the Mistake, 6.4 This way or That way, All way lead to the Bay. 7.1 Observing Similarity in change 7.2 ratios 7.3 Ratios in their Simplest form, 7.4 Problem Solving with Proportional reasoning, 7.5 Sharing , but not equally! | CG -6 C-6.1,<br>CG-8 C- 8.1, C-8.2<br>CG -1 C-1.6,<br>CG-9, C- 9.2 | <b>Activity-1</b> Coin conjoin page no-158,<br><b>Activity -2</b> Binairo page no.-177  | April to August portion assessed in Half Yearly Exam (07-09-2026 to 12-09-2026) |

|                              |  |   |   |   |   |   |
|------------------------------|--|---|---|---|---|---|
| Sep 2026                     | 23   | Grade 8 Part -2<br><b>Chapter -1</b> Fractions in Disguise  | 1.1 Fractions as Percentages, 1.2 Percentage of some quantity, 1.3 using Percentages  | CG-1 C- 1.4, C-1.5<br>CG -9 C- 9.2              | <b>Activity -1</b> Peaceful Knights page no -32   | Half Yearly Exam:<br>07-09-2026 to<br>12-09-2026<br>(covers<br>April–Aug).  |
| Oct 2026                     | 22   | Grade 8 Part -2<br><b>Chapter -2</b> The Baudhayana- Pythagoras Theorem   | 2.1 Doubling a Square ,2.2 Halving Square, 2.3 Hypotenuse of an Isosceles Right Triangle,2.4 Combining Two Different Squares, 2.5 Right-Triangles having integer sidelengths,2.6 A long - Standing open problem,2.7 Further Applications of the Baudhayana -Pythagoras theorem. | CG-4 C-4.2<br>CG- 9 C- 9.2,                     | <b>Activity -1</b> Find the colours! page no -54  | October portion tested in Project RAIL on 03-11-2026.   |
| Nov 2026                     | 14   | Grade 8 Part -2<br><b>Chapter-3</b> Proportional Reasoning-2  | 3.1 Propotionality- A Quick Recap, 3.2 Ratios in Maps ,3.3 Ratios with more than 2 Terms, 3.4 Dividing a Whole in a given Ratio, 3.5 A Slice of the Pie , 3.6 Inverse Proportions.  | CG-1 C- 1.6, CG-9 C-9.1, C-9.2                  | <b>Activity- 1</b> Make a pie chart of your daily activities based on a 24-hours day .  | November portion tested in Project RAIL on 08-12-2026.  |
| Dec 2026                     | 21   | Grade 8 Part -2<br><b>Chapter - 4</b> Exploring some Geometrical Themes<br><b>Chapter-5</b> Tales by Dots and Lines | 4.1 Fractals, 4.2 Visualising Solids, Representation of solids on a plane Surface. 5.1 The Balancing Act, 5.2 Visualising and Interpreting Data,  | CG-3 C-3.2 , C-3.3, C-3.4<br>CG 5 C-5.1 C- 5. 2 | <b>Activity-1</b> Identify Geometrical shapes in daily life.<br><b>Activity-2</b> Draw angles using sticks or straws and measure them using protractor.<br><b>Activity-1</b> Game of Hex page no.-134                                 | December portion tested in Project RAIL on 12-01-2027.  |
| Jan 2027                     | 18   | Grade 8 Part -2<br><b>Chapter-6</b> Algebra Play  | 6.1 Algebra Play 6.2 thinking about ' Think of a Number' Tricks, 6.3 Number Pyramids 6.4 Fun With Grids,6.5 The Largest Product ,6.6 Decoding Divisibility Tricks ,   | CG- 2 C- 2.1, C -2.2,C-2.3, C-2.4,C- 2.5        | <b>Activity-1</b> Make a Number Pyramid using two digits number of your choice.   | Project RAIL on 02-02-2027  |
| Feb 2027<br>(Revision Month) | 19   | Grade 8 Part -2<br><b>Chapter -7</b> Area   | 7.1 Rectangle and Squares, Parallelogram,Rhombus, Trapezium.  | CG-4 C-4.1 C-4.2, C-4.3                         | <b>Activity -1</b> Design a garden using rectangles and squares and calculate the total area ( taking your own measurement units) .<br><b>Activity -2</b> Trace leaves or objects on grid/graph paper and count full and half square. | Annual Examination:<br>01-03-2027 to<br>05-03-2027 &<br>15-03-2027 to<br>20-03-2027 ( Syllabus September to February) |
| <b>CG ID</b>                 | <b>CGs (*CG Mapping - IDs)<br/>(NCERT Middle Stage NCF-2023)</b> |   |   |   |   |   |

|   |   |
|---|---|
| <p>CG-1<br/>Understands numbers and sets of numbers (whole numbers, fractions, integers, rational numbers, and real numbers), looks for patterns, and appreciates relationships between numbers</p>           | <p>C-1.1 Develops a sense for and an ability to manipulate (e.g., read, write, form, compare, estimate, and apply operations) and name (in words) large whole numbers of up to 20 digits, and expresses them in scientific notation using exponents and powers<br/> C-1.2 Discovers, identifies, and explores patterns in numbers and describes rules for their formation (e.g., multiples of 7, powers of 3, prime numbers), and explains relations between different patterns<br/> C-1.3 Learns about the inclusion of zero and negative quantities as numbers, and the arithmetic operations on them, as given by Brahmagupta<br/> C-1.4 Explores and understands sets of numbers, such as whole numbers, fractions, integers, rational numbers, and real numbers, and their properties, and visualises them on the number line<br/> C-1.5 Explores the idea of percentage and applies it to solve problems C-1.6 Explores and applies fractions (both as ratios and in decimal form) in daily-life situations</p> |
| <p>CG-2<br/>Understands the concepts of variable, constant, coefficient, expression, and (one-variable) equation, and uses these concepts to solve meaningful daily-life problems with procedural fluency</p> | <p>C-2.1 Understands equality between numerical expressions and learns to check arithmetical equations<br/> C-2.2 Extends the representation of a number in the form of a variable or an algebraic expression using a variable<br/> C-2.3 Forms algebraic expressions using variables, coefficients, and constants and manipulates them through basic operations<br/> C-2.4 Poses and solves linear equations to find the value of an unknown, including to solve puzzles and word problems<br/> C-2.5 Develops own methods to solve puzzles and problems using algebraic thinking</p>  |
| <p>CG-3<br/>Understands, formulates, and applies properties and theorems regarding simple geometric shapes (2D and 3D)</p>  | <p>C-3.1 Describes, classifies, and understands relationships among different types of two - and three-dimensional shapes using their defining properties/attributes<br/> C-3.2 Outlines the properties of lines, angles, triangles, quadrilaterals, and polygons and applies them to solve related problems<br/> C-3.3 Identifies attributes of three-dimensional shapes (cubes, parallelepipeds, cylinders, cones), works hands-on with material to construct these shapes, and also uses two-dimensional representations of three-dimensional objects to visualise and solve problems<br/> C-3.4 Draws and constructs geometric shapes, such as lines, parallel lines, perpendicular lines, angles, and simple triangles, with specified properties using a compass and straightedge<br/> C-3.5 Understands congruence and similarity as it applies to geometric shapes and identifies similar and congruent triangles</p>   |

|  |  |
|--|--|
| <p>CG-4<br/>Develops understanding of perimeter and area for 2D shapes and uses them to solve day-to-day life problems</p>               | <p>C-4.1 Discovers, understands, and uses formulae to determine the area of a square, triangle, parallelogram, and trapezium and develops strategies to find the areas of composite 2D shapes<br/>C-4.2 Learns the Baudhayana-Pythagoras theorem on the lengths of the sides of a right-angled triangle, and discovers a geometric proof using areas of squares erected on the sides of the triangle, and other related geometric constructions from the Sulba-Sutras<br/>C-4.3 Constructs various designs (using tiling) on a plane surface using different 2D shapes and appreciates their appearances in art in India and around the world<br/>C-4.4 Develops familiarity with the notion of fractal and identifies and appreciates the appearances of fractals in nature and art in India and around the world</p> |
| <p>CG-5<br/>Collects, organises, represents (graphically and in tables), and interprets data/information from daily-life experiences</p> | <p>C-5.1 Collects, organises, and interprets the data using measures of central tendencies such as average/mean, mode, and median<br/>C-5.2 Selects, creates, and uses appropriate graphical representations (e.g., pictographs, bar graphs, histograms, line graphs, and pie charts) of data to make interpretations</p>  |
| <p>CG-6<br/>Develops mathematical thinking and the ability to communicate mathematical ideas logically and precisely</p>                 | <p>C-6.1 Applies both inductive and deductive logic to formulate definitions and conjectures, evaluate and produce 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</p>  |
| <p>CG-7<br/>Engages with puzzles and mathematical problems and develops own creative methods and strategies to solve them</p>            | <p>C-7.1 Demonstrates creativity in discovering one's own solutions to puzzles and other problems, and appreciates the work of others in finding their own, possibly different, solutions<br/>C-7.2 Engages in and appreciates the artistry and aesthetics of puzzle-making and puzzle-solving</p>   |

|   |   |
|---|---|
| <p>CG-8<br/>Develops basic skills and capacities of computational thinking, namely, decomposition, pattern recognition, data representation, generalisation, abstraction, and algorithms in order to solve problems where such techniques of computational thinking are effective</p> | <p>C-8.1 Approaches problems using programmatic thinking techniques such as iteration, symbolic representation, and logical operations and reformulates problems into series of ordered steps (i.e., algorithmic thinking)</p> <p>C-8.2 Learns systematic counting and listing, systematic reasoning about counts and iterative patterns, and multiple data representations; learns to devise and follow algorithms, with an eye towards understanding correctness, effectiveness, and efficiency of algorithms</p> |
| <p>CG-9<br/>Knows and appreciates the development of mathematical ideas over a period of time and the contributions of past and modern mathematicians from India and across the world</p>   | <p>C-9.1 Recognises how concepts (like counting numbers, whole numbers, negative numbers, rational numbers, zero, concepts of algebra, geometry) evolved over a period of time in different civilisations.</p> <p>C-9.2 Knows and appreciates the contributions of specific Indian mathematicians (such as Baudhayana, Pingala, Aryabhata, Brahmagupta, Virahanka, Bhaskara, and Ramanujan)</p>   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |