



# BOKARO PUBLIC SCHOOL

Sector - III/C, Bokaro Steel City

## SYLLABUS

Class: -VIII

Session: 2023-24

Subject: - Mathematise

Prescribed book: Learning hill let 's magnify mathematics – class  
NCERT mathematics (Text for class – VIII).

| Sl.No. | Month | Working Day | Chapters   | Activity   |
|--------|-------|-------------|--|--|
| 1.     | April | 18          | <ul style="list-style-type: none"><li><b>Rational Numbers:</b> - 1. Introduction.<br/>2.Rational No's on a no. Line.<br/>3.Equivalent rational No's.<br/>4.Comparison of Rational no's<br/>5.Rational no's b/w rational no's<br/>6.Absolute value.<br/>7.Addition subtraction and properties of rational no's<br/>8.Multiplication and division of rational no's &amp; properties.</li><li><b>Exponents &amp; powers:</b> -1. Exponents and base.<br/>2.Reciprocals.<br/>3.Laws of Exponents.<br/>4.Expanded form.</li></ul> | <ul style="list-style-type: none"><li><b>1.Rational Numbers.</b><br/><b>Put the Numbers in the Bins.</b></li></ul> |
| 2.     | May   | 04          | <b>Exponents &amp; Powers:</b> -5. Expressing large and small Numbers in scientific Notation.  | <ul style="list-style-type: none"><li><b>2.Exponents &amp; Power: -Spots the fact cards.</b></li></ul>             |

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| 3. | June      | 14 | <ul style="list-style-type: none"> <li>• <b>Quare and Square Roots:</b> -1. Square no's and its properties. 2. Finding squares using identities.3. Square root. 4.finding square root but prime &amp; factorization, ones and tens method, Repeated subtraction division method. 5.Square root of rational no's, decimals, on - perfect squares, products &amp; fractional no's. 6.Estimating squares root. 7.Word problems Cubes and cube roots: - 1. Perfect cubes and its properties.2. Cube of a rational no . 3.Finding Cube root using prime factorisation and estimation.</li> </ul> | <ul style="list-style-type: none"> <li>• 3.Square and square roots.</li> <li>• - Square root maze</li> <li>• 4.Cub and cube roots.</li> <li>• - Cube root maze.</li> </ul>  |
| 4. | July      | 21 | <p><b>Playing with numbers:</b> - 1. About magic squares.<br/>2.General form of no's and revering the digits of 2-digit and 3-digit no.<br/>3.Cryptarithms.<br/>4.Divisibility rules.<br/>5.Coding - Decoding.<br/>6.No. patterns.</p> <p><b>Algebraic Expression &amp; ideates:</b> -1. Various terns.<br/>2. Types and degree of poly</p>   | <ul style="list-style-type: none"> <li>• 5.Playing with numbers.</li> <li>• Juggling with numbers</li> <li>• 6.Card matching game in algebra expression &amp; identities</li> </ul>   |
| 5. | August    | 21 | <ul style="list-style-type: none"> <li>• <b>Factorisation:</b> -1. Prime factors and prime factorisation. 2. HCF of monomial. 3. Factorisation by regrouping using algebraic identities, middle term sop liting. 4.To divide polynomials using factorisation.</li> <li>• <b>Linear Equations in one variable:</b> - Solving linear equation with variable on one side &amp; both sides. 2Reducing and solving linear equation.</li> <li>• 3. Word problem.</li> </ul>   | <ul style="list-style-type: none"> <li>• 7.Factorisation.</li> <li>• Factoring" Tree"</li> <li>• Sieve of Eratosthenes.</li> <li>• 8.Linear equations in one Variable :- Use of fraction Share paper piece and to solve.</li> </ul> |
| 6. | September | 18 | <ul style="list-style-type: none"> <li>• <b>Comparing Quantities:</b> -1. Percentage increase and decrease. 2.Profit and loss, overheads &amp; discount.3. Direct</li> </ul>  |   |

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|    |          |    | <p>&amp; indirect taxes &amp; GST4.Difference between SI and CI.<br/>5.Calculating CI when rate of inters is compounded annually ,half - yearly ,quarterly. 6.Problems on growth &amp;depreciation.</p> <ul style="list-style-type: none"> <li>• <b>Revision And Examination.</b></li> </ul>  |   |
| 7. | October  | 17 | <ul style="list-style-type: none"> <li>• <b><u>Direct &amp; Inverse Proportion:</u></b> - 1. Direct variation and direct proportion its real-life application. 2.inverse variation, inverse proportion and its real-life application. 3.problem solving - time &amp; Work, pipes &amp; cistern, time and distance.</li> <li>• <b><u>Understanding Quadrilaterals:</u></b> - 1. types, diagonal, angle sum property.2Exterior angle. 3.Properties of types of quadrilaterals. 4.Property of types of parallelograms.</li> <li>• <b><u>Construction of quadrilaterals:</u></b> - 1. To construct quadrilaterals when different element is given. 2. construction by applying property of quadripara.</li> </ul> | <ul style="list-style-type: none"> <li>• <b>9.use of models and chart to explain types of quadrilaterals and their properties.</b></li> </ul>   |
| 8. | November | 14 | <ul style="list-style-type: none"> <li>• <b><u>Visualising Solid Shapes:</u></b> -1. To draw 3-Dshapesas 2D shapes. 2.Nested solids. 3. Different views of solids. 4.map space around us. 5.polyhedrons. 6.Platonic Solids. 7.Euler's formula for area of. (a) Rectangle. (b). Square. (c) Triangle. (d) Parallelogram. (e). Trapezium. (f). Quadrilateral. (g). Rhombus. (h)Various polygamas &amp; rectilinear figures.</li> <li>• <b><u>Surface Area and volume:</u></b> - To find S. A. and volume of cube, cuboid, cylinder, real - life problems.</li> </ul>  | <ul style="list-style-type: none"> <li>• <b>10. Measurement of volume and area of real-life objects using metre scale and measuring tap and finding volume, area though practical approaches.</b></li> </ul>                              |
| 9. | December | 20 | <ul style="list-style-type: none"> <li>• <b><u>Data Handline:</u></b> -1. Data &amp; its classification, 2. Discreet and continuous data and its frequency distribution. 3.Groped data and its frequency distribution. 4.Single, double bar graphs and histograms.5. Representation of data though pie chart.</li> </ul>  | <ul style="list-style-type: none"> <li>• <b>11.Asking students to make bar graph of the scores they have archfiend in the annual exam from prep to write a achievement or depreciation in their scores based on that data.</b></li> </ul> |

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|     |          |           | <ul style="list-style-type: none"> <li>• <b>Probability:</b> -1. Experiments, Random experiments and outcomes. 2.Sample space. 3.Different types of and events. 4.Find probability of an event.</li> <li>• <b>Introduction graphs:</b> -1. Plot points on line &amp; on plane. 2.types line graph. 3. Cost quantity graphs. graph, Scintigraph.</li> </ul> |  |
| 10. | January  | <u>20</u> | <ul style="list-style-type: none"> <li>• <b>Revision</b></li> </ul>  |  |
| 11  | February | 20        |  |  |
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Prepared by :-Ujjwal Pratap.

**Other Prescribed Book :**

Date of submission: .....