First Term Curriculum
Session - 2023-24
Subject- Mathematics
Class -VIII

|  | FEB/MARCH | APRIL | MAY | JUNE |
| :---: | :---: | :---: | :---: | :---: |
| Concepts | Ch. 1 Rational <br> Numbers <br> Ch. 2 Squares and Square Roots | Ch. 3 Cube and Cube Roots Ch. 4 Exponents | Ch. 5 Playing with numbers <br> Ch. 6 Algebraic Expressions | Ch. 7 Linear equation in one variables Ch. 8 Understanding Shapes <br> Ch. 9 3D visualization |
| Learning Outcomes | Students will be <br> able <br> To generalize the <br> properties of <br> arithmetic <br> operations of <br> rational numbers. <br> To represent <br> rational numbers <br> on the number <br> line. <br> - To calculate as <br> many rational <br> numbers as <br> possible between <br> two given <br> rational numbers. <br> To understand <br> the properties of a <br> perfect square. <br> To find <br> Pythagorean <br> triplets. <br> To find the square <br> root of a number. | Students will be able <br> - To understand the properties of a perfect cubes. <br> - To find the cube root of a perfect cube. <br> - To understand the laws of exponents for rational numbers. <br> - To find the expanded and standard form of numbers. <br> - To express very small numbers in standard form. | Students will be able <br> - To understand the divisibility of numbers. <br> - To express types of expressions and terms. <br> - To add, subtract, multiply and divide algebraic expressions. <br> - To read and draw linear graphs. <br> - To factorize algebraic expressions. | Students will be able <br> - To apply the general rule for finding the solution of a linear equation. <br> - To solve and apply linear equations. <br> - To find solutions of equations. <br> - To understand angle sum property for polygons. <br> - To understand the properties of quadrilaterals. <br> - To understand polyhedrons and types of polyhedrons. <br> - To apply Euler's formula. |
| Skills | Understanding/ <br> Application/Critic al thinking/ Problem solving | Understanding/ Application/Critical thinking/ Problem solving | Understanding/ Application/Critical thinking/ Problem solving | Understanding/ Application/Critical thinking/ Problem solving |
| Activities | Competency-skills based activity/ Experiential learning Activity : <br> - Flash Cards( Properties) <br> - Vedic Math Activity | Competency-skills based activity/ Experiential learning Activity : <br> - Vedic Math to find the cube <br> - Flash card | Competency-skills based activity/ Experiential learning Activity : <br> - Math Magic (Ages,dates and shoe sizes of family members) | Competency-skills based activity/ Experiential learning Activity : <br> - Verification of algebraic Identities. <br> - Angle sum property |
| Assessments | - Pen - Paper Test <br> - Quiz/Questionnaire <br> - Notebook Maintenance <br> - CW/HW Assignment <br> (Main Book: 'I did IT' Mathematics ) |  |  |  |

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Final Term Curriculum
Session - 2023-24
Subject- Mathematics
Class -VIII

|  | JULY/AUGUST | SEPTEMBER | OCTOBER | NOVEMBER |
| :---: | :---: | :---: | :---: | :---: |
| Concepts | Ch. 13 Comparing <br> Quantities <br> Ch. 14 Direct and Inverse <br> Variation | Ch. 11 Perimeter and Area of Plane figures <br> Ch. 12 Surface Area and Volume | Ch. 12 Surface Area and Volume(Contd.) <br> Ch. 15 Data handling and Probability | Ch. 16 Graphs |
| Learning Outcomes | Students will be able <br> - To <br> recapitulate ratio and percentage . <br> - To <br> understand GST and <br> discount percentage. <br> - To apply <br> formulae for simple and compound interest. <br> - To learn about direct and inverse proportion. <br> - To solve word problems. | Students will be able <br> - To find the area and perimeter of a trapezium and a rhombus. <br> - To find the area of polygons. <br> - To find the surface area and volume of a cube and cuboid. | Students will be able <br> - To find the surface area and volume of a cylinder <br> - To learn about frequency distribution of grouped and ungrouped <br> To draw and read histograms and pie charts. <br> - To learn about probability | Students will be able <br> - To understand coordinates of a point. |
| Skills | Understanding/ Application/Critical thinking/ Problem solving | Understanding/ Application/Critical thinking/ Problem solving | Understanding/ Application/Critical thinking/ Problem solving | Understanding/ Application/Critical thinking/ Problem solving |
| Activities | Competency-skills based activity/ Experiential learning Activity : <br> - Bill Activity <br> - Paper Activity(Direct Variation) | Competency-skills based activity/ Experiential learning Activity : <br> - Slips of questions(Perimeter and Area) <br> - Derivation of the formulae of a cuboid | Competency-skills based activity/ Experiential learning Activity : <br> - Chart Paper Activity(Graph) | Competency-skills based activity/ Experiential learning Activity : <br> - Coordinate Activity |
| Assessments | - Pen - Paper Test <br> - Quiz/Questionnaire <br> - CW/HW Assignment <br> - Notebook Maintenance (Main Book: 'I did IT' | thematics) |  |  |

