Cambrioge
First Term Curriculum
Subject: Mathematics
Class: VIII
Session: 2024-25

| Month | APRIL | MAY | JUNE | JULY |
| :---: | :---: | :---: | :---: | :---: |
| Concepts | Ch-1 Rational Numbers <br> Ch-2 Squares and Square Roots | Ch-2 Squares and Square Roots(Contd.) C-3 Cube and Cube Roots Ch-4 Exponents | Ch-4 Exponents(Contd.) <br> Ch-5 Playing with numbers | Ch-6 Algebraic <br> Expressions <br> Ch-7 Linear equation in one variables |
| Learning Outcomes | Students will be able <br> - To generalize the properties of arithmetic operations of rational numbers. <br> - To represent rational numbers on the number line. <br> - To calculate as many rational numbers as possible between two given rational numbers. <br> - To understand the properties of a perfect square. <br> - To find Pythagorean triplets. | Students will be able <br> To find the square root of a number. <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. | Students will be able <br> - To express very small numbers in standard form. <br> - To understand the divisibility of numbers. | Students will be able <br> - To express types of expressions and terms. <br> - To add, subtract, multiply and divide algebraic expressions. <br> - To factorize algebraic expressions. <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. |
| 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> - Flash Cards <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> - Flash Cards |
| Art Integration | English, Science, Social Study and Art |  |  |  |
| Assessments | - Pen - Paper Test <br> - Quiz/ Questionnaire <br> - Notebook Maintenance <br> - C.W./ H.W./ Assignments <br> Main Book: ‘I Did It’ Mathematics <br> Publisher: Cambridge University Press (Revised Edition) |  |  |  |

Final Term Curriculum
Subject: Mathematics
Class: VIII
Session: 2024-25

| Month | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Concepts | Ch-8 <br> Understanding Shapes <br> Ch-9 3D visualization | Ch-10 Construction of Quadrilaterals <br> Ch-11 Perimeter and Area of Plane figures | Ch-11 Perimeter and Area of Plane figures (Contd.) <br> Ch-12 Surface Area and Volume | Ch-13 Comparing <br> Quantities <br> Ch-14 Direct and Inverse Variation | Ch-15 Data handling and Probability <br> Ch-16 Graphs |
| Learning Outcomes | Students will be able <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. | Students will be able <br> - To construct different types of quadrilaterals. <br> - To find the area and perimeter of a trapezium and a rhombus. | Students will be able <br> - To find the area of polygons. <br> - To find the surface area and volume of a cube and cuboid. <br> - To find the surface area and volume of a cylinder. | Students will be able <br> - To recapitulate ratio and percentage. <br> - To understand GST and discount percentage. <br> - To apply 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 learn about <br> - Frequency distribution of grouped and ungrouped data. <br> - To draw and <br> - read histograms and pie charts. <br> - To learn about <br> - Probability. <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 | Understanding/ Application/ Critical thinking/ Problem solving |
| Activities | Competency-skills based activity/ Experiential learning activity : <br> - Angle sum property <br> - Verification of Euler's Formula | Competency-skills based activity/ Experiential learning activity : <br> - Constructions <br> - Slips of questions (Perimeter and Area) | Competency-skills based activity/ <br> Experiential learning activity : <br> - Derivation of the formulae of a cuboid <br> - Chart Paper Activity (Graph) | Competency-skills based activity/ Experiential learning activity : <br> - Bill Activity <br> - Paper Activity (Direct Variation) | Competency-skills based activity/ Experiential learning activity : <br> - Experimental and theoretical probability <br> - Coordinate Activity |
| Art Integration | English, Science, Social Study and Art |  |  |  |  |
| Assessments | - Pen - Paper Test <br> - Quiz/Questionnaire <br> - C.W./ H.W./ Assignments <br> - Notebook Maintenance <br> Main Book: ‘I Did It’ Mathematics <br> Publisher: Cambridge University Press (Revised Edition) |  |  |  |  |

