Love Dale Central School
Curriculum 2022-23
Sub: Maths
Class : VII

Month	Book	Chapter/Lesson title	Topics	Activity	Learning Outcome
April	A Text book of mathematics - Ratna Sagar	Integers	Four mathematical operations on integers	Activity on operation of integers	1. Compare integers. 2. Perform four mathematical operation involving integers. 3. Use properties to simplify.
June	A Text book of mathematics - Ratna Sagar	Fractions and Decimals	Types of fractions, Convertion of fractions to decimals and vice versa, Four operations on fractions and decimals, Solve word problems.	Multiplication of decimals on 10X10 grid	1. Identify different types of fractions. 2. Compare Fractions & Decimals. Arrange them in order. 3. Perform four mathematical operation involving fractions and decimals. 4. Solve word problems of fractions & decimals from daily life situations. 5. Express decimals into fractions and vice versa.
July	A Text book of mathematics - Ratna Sagar	Lines and Angles	Types of angles,Trasversal, angles made by transveral	Verify that when two lines intersect then vertically opposite angles are equal by paper cutting and pasting	1. Identify different type of angles. 2. Identify parallel lines and intersecting lines. 3. Recognize angles made by transversal on two lines
August	A Text book of mathematics - Ratna Sagar	Simple Equations	linear equations in one variable, Forming and solving equations, Solving application based sums in day to day life situations.		1. Set up an equation for given statement and vice versa. 2. Solving an equation and verify the result. 3. Apply simple equations to solve daily life situations.
August	A Text book of mathematics - Ratna Sagar	Triangles and its properties	Median and Altitude of a triangle, Properties of the angles of a triangle, Properties of the sides of a triangle, Right angled triangles and Pythagoras	Lab activity: Justification of, 1)Exterior angle property.2) Angle sum property of a triangle.	1. Identify, opposite side given to a vertex and vice versa. 2. Apply exterior angle property. 3. Apply Pythagoras theorem
September	A Text book of mathematics - Ratna Sagar	Data Handling	Frequency distribution table, Mean median and mode, Interpretation and drawing bar graph, Probability	Students will be told to collect the information of their favorite games in a school and draw a graph	1. Arrange data in frequency distribution table 2.Find mean, median and mode of the given data. 3. Draw and read bar graph.
September	A Text book of mathematics - Ratna Sagar	Comparing Quantities	Ratio and Proportion, Unitary method, Percentage and its applications, Per cent of a given quantity, Finding whole number using the given percentage, percent change, Profit and Loss, Simple Interest		1. Compare quantities using ratio & proportion percentage and decimals. 2. Calculate simple interest, rate and time period. 3. Calculate Profit and Loss, CP, SP etc 4. Apply Unitary method while solving sums. 5. Solve problems related to daily life situations.
October	A Text book of mathematics - Ratna Sagar	Algebraic Expressions	Types of algebraic expressions, Addition and subtraction of algebraic expression, Finding the value of an expression		1. Identify coefficients, constant terms, powers and factors. 2. Find the value of algebraic expression. 3. Convert mathematical statements into algebraic expressions. 4. Add and subtract algebraic expressions.
October	A Text book of mathematics - Ratna Sagar	Cogruence of Triangles	Congruence of line segments, angles, rectangles, circles, triangles. Criteria for congruence of triangles (SSS, SAS, ASA and RHS)	Showing congruence of geometrical figures using natural objects like CD's , photographs, stamps etc.	1. Identify congruence figures. 2. Understand four different criteria for congruence of triangles. 3. Identify the corresponding part of congruent figure.
November	A Text book of mathematics - Ratna Sagar	Rational Numbers	Properties of rational numbers, rational numbers on number line, Rational numbers between two rational numbers, Operations on rational numbers	Representation of rational numbers on number line.	1. Represent and compare rational numbers on number line. 2. Compare rational numbers and arrange them in order. 3. Define absolute value of a rational number. 4. Perform four operations on rational numbers.
November/ December	A Text book of mathematics - Ratna Sagar	Practical Geometry	Construction of parallel lines, Construction of triangles (SSS, SAS, ASA ,RHS)	Construction of triangles using geometrical instruments.	1. Construct parallel and perpendicular lines. 2. Construct triangles when any three sufficient measurements of triangle are given.
January	A Text book of mathematics - Ratna Sagar	Perimeter and Area	Perimeter and area of square and rectangle, Area of parallelogram, Area and circumference of circle, Application based word problems.	To verify the formula for the area of a circle.	1. Understand the concept of area and perimeter. 2. Use formula for calculating area of square, rectangle, triangle and circle. 3. Calculate area of path inside or outside a rectangle or square.
January	A Text book of mathematics - Ratna Sagar	Exponents and Powers	Exponents, Powers of rational numbers, Laws of exponents, Expressing large numbers in the standard form	Preparing chart on Laws of exponents.	1. Express numbers in power notation. 2. Understand laws of exponents. 3. Apply laws of exponents to simplify problems.
February	A Text book of mathematics - Ratna Sagar	Symmetry	Reflection symmetry, Rotational symmetryLines of symmetry		1. Identify symmetry in nature. 2. Draw symmetrical figures. 3. Understand reflection and rotational symmetry.
February	A Text book of mathematics - Ratna Sagar	Visualising solid shapes	Nets for building 3D shapes,Visualising solid objects	GROUP ACTIVITY : Making of nets of different 3 D objects like cube, cuboids, cylinder, cone etc	1. Draw some common 3D figures. 2. Draw nets for 3D shapes. 3. Identify face, vertices and edges