

**CAMBRIAN PUBLIC SCHOOL**

**KANKE ROAD, RANCHI**

**SESSION-2024-2025**

**CLASS - VII**

**SUBJECT – MATHEMATICS**

**LEARNING PLAN OUTCOMES**

<b><u>Serial Number</u></b>	<b><u>Month</u></b>	<b><u>Name of the Chapter</u></b>	<b><u>Learning Outcomes</u></b>
1.	April	Integers	Students will able to: *Define set of integers list real life situations involving opposites. *Compare and order integers . *Draw number line based on addition and subtraction of integers .
2.	April	Fractions	Students will be able to : *Learn the use of fraction in day to day life and various activities through mathematical notation. *Explain different types of fractions.  * Convert fractions in its lowest term. *Comparison and ordering fraction *Addition and subtraction multiplication and division of fractions.
3.	May	Decimals	Students will be able to: *Explain the concept of decimal and importance of using decimals in everyday life. *Describe the relationship between place value and decimal points. *Write and read numbers with decimal points . *Understand how to round decimal fraction to next highest number .
4.	June	Rational Numbers	Students will be able to: *Define and identify rational number (including fraction, decimal and integer). *Understand properties of rational numbers. *Representation of rational numbers on the number line. *Find a rational number at a specified point between two rational numbers

5.	July	Exponents	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>*Learn what is base and exponent they will learn that exponents are the shortcuts for multiplication.</li> <li>*Identify the base and exponents of a power.</li> <li>*Express small numbers in standard form.</li> <li>* Evaluate power of integer and rational numbers with positive integer exponents.</li> <li>*Solve real world problems using powers and exponents .</li> </ul>
6.	July	Algebraic Expressions	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>*Learn addition and subtraction of algebraic expressions.</li> <li>*Evaluate expression for given values of a variable .</li> <li>*Use properties of operations to write equivalent expression .</li> <li>*Solve one step equation.</li> <li>*Check the solution to an equation.</li> </ul>
7.	July	Linear equation in one variable.	<p>Students will be able to :</p> <ul style="list-style-type: none"> <li>*Learn to frame mathematical equations to drive solution for generalized problems.</li> <li>*Find a linear equation .</li> <li>*Understand the equation of two lines, determine whether their graph are parallel or perpendicular .</li> <li>* Know the rules for solving a linear equation.</li> </ul>
8.	July	Probability	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>*Calculate the probability of simple compound and complementary events.</li> <li>*Explain the concept of probability and importance of using probability in everyday life</li> </ul>

9.	August	Ratio and proportion	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>*Recognise and apply ratio and proportion to solve life problems.</li> </ul>
10.	August	Unitary method	<p>Students will be able to express unitary method in order to solve daily life problems they will learn to analyse and evaluate their skills.</p>
11	October	Comparing quantities	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>*Define and calculate the simple interest and simple discount.</li> <li>*Find compound interest when interest is compounded annually and when interest is compounded half yearly.</li> <li>*Calculate the installment payment.</li> </ul>
12	October	Lines and angles	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>*Classify and understand pairs of angles based on their properties. Thinking reasoning remembering and applying concepts will be enhanced.</li> </ul>

13.	November	Properties of parallel lines	Students will be able to: *Define and understand parallel lines. *They will be able to understand that the sum of the consecutive interior angle is equal to $180^\circ$
14	November	Properties of triangles	Students will be able to: *Define and understand the different properties of triangle. *Identify and use the unique characteristics of right, isosceles, equilateral, acute, obtuse and scalene triangles.
13	November	Congruence	Students will be able to: *Understand that congruent shapes have equal angles and length. *Recognise SSS,SAS, and ASA properties to prove congruency. *Classify congruency through reasoned algebraic proof.
14	December	Constructions	Students will be able to: *Construct a quadrilateral when four sides and one diagonals are given. *Understand the Concept of length and angle measurement.
15	December	Mensuration	Students will be able to: *Define perimeter and area of square and a rectangle. *Determine perimeter and area of assorted shapes.
16	January	Collection and organisation of data	Students will be able to: *Develops the skills to collect,organise, display,analyse and interpret the information.
17	January	Bar graph	Students will be able to: *Learn to construct bar and picture graph for data they collect. *Represents circle graph and pie chart.