CONTINUOUS LEARNING PROCESS (CLP) CLASS 9 MATHEMATICS

S.No.	Month	Chapter	Learning Outcomes
1	April	Chapter 1	The learner
		Number systems	 Gets the knowledge of various types of numbers viz. Natural numbers, Whole numbers, Rational numbers Prime numbers etc. which constitute the real number systems Explores the relation between various types of numbers. Appreciates the fact that infinitely many rational numbers can be inserted between two given number. Represents different rational and irrational numbers on the number line and rationalize the given real number. Prepares the presentation on the topic representation of irrational numbers on the number line or making the square root spiral. Skillsreasoning , creativity ,problem solving
2	May	Chapter 2 Polynomials	 The learner Acquires the knowledge of algebraic expression and algebraic identities. Differentiates between algebraic expression and polynomials, explores types of polynomials on the basis of terms and on the basis of their degrees Defines zeroes and coefficients of polynomials, understands Remainder and Factor theorem and at least ten algebraic identities. Prepares presentation on different Algebraic identities. Extends the learning by the application and verification of some identities Skillslogical thinking ,problem solving and creativity

		Chapter 3	The learner
		Coordinate Geometry	 Understands the Cartesian coordinate plane, x-axis, y-axis, horizontal line, vertical line, origin, abscissa, ordinate and different quadrants. Plots different points in the Cartesian coordinate plane. Describes points on the plane. Understands coordinates as distances. Recognises the presence of coordinate system in everyday life. Skillsobservation, reasoning
3	July	Chapter 6	The learner
		Lines and angles Chapter 12	 Recognizes and defines line, line segments and rays. Identifies obtuse, acute and right angles. Understands parallel and perpendicular lines. Justifies Angle sum property of triangle and exterior angle property of triangle. Co-relates lines and angles with the natural world. Skillsobservation and correlation The learner
			1. Recalls triangle and area of triangle
		Heron's Formula	 Understands Heron's formula for finding Area of a triangle Determines area of a triangle whose sides are given
			4. Applies Heron's formula in daily life
			Skillscreativity and problem solving
4	August	Chapter 13 Surface areas and Volumes	 The learner 1. Recalls plane figures and solid figures and differentiates them 2. Identifies different solids in the surrounding and defines their base, edge and vertices 3. Understands the formulae for finding the surface areas and volumes of a cuboid, cube, cylinder, cone, sphere and hemisphere. 4. Applies these formulae in real life.
			SkillsObservation and correlation

5	September	Chapter 4 Linear equations in two variables	 The learner 1 Understands the concept of linear equation in one variable and linear equation in two variables. 2 Learns the method of finding the points on the number line and able to draw its graph. 3 Knows the representation of the number line in one variable and in two variables. 4 Frames the linear equation for given word problem of daily life. 5 Find the solution of linear equation in two variables. SkillsReasoning and Analytical thinking
		Chapter 15 Probability	 The learner Demonstrates understanding of the concepts of probability. Explains and interprets the probability of an event. Determines the probability of simple events Identifies the probability of events through a given sample set. Solves real life problems using probability Skills Analytical thinking and correlation
6	October	Chapter 7 Triangles Chapter 8 Quadrilaterals	 The learner 1.Recalls different types of triangles and their properties 2.Draws different types of triangles 3.Understands different congruence conditions of triangles 4. Proves theorems 5.Applies triangle inequalities SkillsCritical thinking and correlation. The learner Recalls different types of quadrilaterals and their properties Identifies different quadrilaterals and designs them under given conditions. Explores similarity and difference between different
			 Explores similarity and difference between different quadrilaterals. Applies different theorems in the problems. Prepares a presentation on the types of quadrilaterals and their properties. SkillsObservation and logical thinking

7	November	Chapter 10	The learner
			1. Defines circle and its parts.
		Circles	 Draws chords, sectors and segments of a circle
			3. Determines centre, radius of a circle by construction.
			4. Understands important theorems and apply them in
			problems.
			5. Recognizes cyclic quadrilateral and memorizes its properties.
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			SkillsObservation ,reasoning
8	December	Chapter 11	
			The learner
		Constructions	1. Recalls how to construct the perpendicular bisector of a
			line segment, angles of 30°,45°,60°,90° ,120° and the
			angle bisector of any angle
			2. Justifies the validity of these constructions.
			3. Constructs a triangle whose base, base angle and sum of
			other two sides are given.
			 Analyses the construction of triangle given its base, base angle and difference of other two side.
			SkillsDrawing and analytical thinking
9	January	Chapter 14	
5	January		The learner
		Statistics	1. Recalls the basic terms of statistics learned in the
		Statistics	lower classes.
			2. Understands the concept of a data and process of its
			collection.
			3. Prepares a grouped frequency table.
			4. Understands how to draw a bar graph, and histogram
			5. Verifies which graph is suitable for the given data.
			SkillsObservation and analytical thinking
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