

CONTINUOUS LEARNING PROCESS (CLP)

CLASS 9

MATHEMATICS

S.No.	Month	Chapter	Learning Outcomes
1	April	Chapter 1 Number systems	<p>The learner</p> <ol style="list-style-type: none"> 1. Gets the knowledge of various types of numbers viz. Natural numbers, Whole numbers, Rational numbers Prime numbers etc. which constitute the real number systems 2. Explores the relation between various types of numbers. 3. Appreciates the fact that infinitely many rational numbers can be inserted between two given number. 4. Represents different rational and irrational numbers on the number line and rationalize the given real number. 5. Prepares the presentation on the topic representation of irrational numbers on the number line or making the square root spiral. <p>Skills----reasoning , creativity ,problem solving</p>
2	May	Chapter 2 Polynomials	<p>The learner</p> <ol style="list-style-type: none"> 1. Acquires the knowledge of algebraic expression and algebraic identities. 2. Differentiates between algebraic expression and polynomials, explores types of polynomials on the basis of terms and on the basis of their degrees 3. Defines zeroes and coefficients of polynomials, understands Remainder and Factor theorem and at least ten algebraic identities. 4. Prepares presentation on different Algebraic identities. 5. Extends the learning by the application and verification of some identities <p>Skills----logical thinking ,problem solving and creativity</p>

		Chapter 3 Coordinate Geometry	<p>The learner</p> <ol style="list-style-type: none"> 1. Understands the Cartesian coordinate plane, x-axis, y-axis, horizontal line, vertical line, origin, abscissa, ordinate and different quadrants. 2. Plots different points in the Cartesian coordinate plane. 3. Describes points on the plane. 4. Understands coordinates as distances. 5. Recognises the presence of coordinate system in everyday life. <p>Skills----observation, reasoning</p>
3	July	Chapter 6 Lines and angles Chapter 12 Heron's Formula	<p>The learner</p> <ol style="list-style-type: none"> 1. Recognizes and defines line, line segments and rays. 2. Identifies obtuse, acute and right angles. 3. Understands parallel and perpendicular lines. 4. Justifies Angle sum property of triangle and exterior angle property of triangle. 5. Co-relates lines and angles with the natural world. <p>Skills----observation and correlation</p> <p>The learner</p> <ol style="list-style-type: none"> 1. Recalls triangle and area of triangle 2. Understands Heron's formula for finding Area of a triangle 3. Determines area of a triangle whose sides are given 4. Applies Heron's formula in daily life <p>Skills----creativity and problem solving</p>
4	August	Chapter 13 Surface areas and Volumes	<p>The learner</p> <ol style="list-style-type: none"> 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. <p>Skills---Observation and correlation</p>

7	November	Chapter 10 Circles	<p>The learner</p> <ol style="list-style-type: none"> 1. Defines circle and its parts. 2. 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. <p>Skills----Observation ,reasoning</p>
8	December	Chapter 11 Constructions	<p>The learner</p> <ol style="list-style-type: none"> 1. Recalls how to construct the perpendicular bisector of a line segment, angles of $30^\circ, 45^\circ, 60^\circ, 90^\circ, 120^\circ$ 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. 4. Analyses the construction of triangle given its base, base angle and difference of other two side. <p>Skills----Drawing and analytical thinking</p>
9	January	Chapter 14 Statistics	<p>The learner</p> <ol style="list-style-type: none"> 1. Recalls the basic terms of statistics learned in the 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. <p>Skills---Observation and analytical thinking</p>

