

MATHEMATICS				
MONTH	NO. OF PERIODS	TOPIC	SUB TOPIC	LEARNING OBJECTIVE
APRIL	19	Chapter 1 Number Systems	Introduction to Real Numbers Classification of Real Numbers	Recall natural numbers, whole numbers, integers and Rational numbers and classify them.
		Chapter 1 Number Systems	Rational Numbers Exercise 1.1	Calculate and find rational numbers between any two rational numbers in order to prove that there are infinite rational numbers between any two given rational numbers
		Chapter 1 Number Systems	Decimal Representation of Real Numbers Exercise 1.3	Deduce the value of a given fraction in its decimal form and infer if the decimal number is terminating or non-terminating
		Chapter 1 Number Systems	Representing rational numbers in p/q form Exercise 1.3	Represent a given number in the form p/q in order to show whether the given number is rational or not
		Chapter 1 Number Systems	Finding irrational numbers and identification Exercise 1.3	Calculate and find irrational numbers between any two rational numbers in order to prove that there are infinite irrational numbers between any two given rational numbers
		Chapter 1 Number Systems	Operations on real numbers Exercise 1.4	Use the commutative, associative and distributive laws for addition and multiplication for irrational numbers
		Chapter 1 Number Systems	Rationalisation Exercise 1.4	Rationalize the denominator of a given expression with a square root term in the denominator and convert it to an equivalent expression whose denominator is a rational number
		Chapter 1 Number Systems	Laws of exponents for real numbers Exercise 1.5	Extend the laws of exponents and simplify a given expression
		Chapter 1 Number Systems	Art integrated activity/ lab activity Square root spiral(Exercise 1.2)	Square root spiral to represent irrational numbers on number line
		Chapter 1 Number Systems	Revision	to recall all the concepts of the chapter
Chapter 1 Number Systems	Test	Assessment of students		
MAY	19	Chapter 2 Polynomails	Introduction to Polynomials Exercise 2.1	Recognize variables and their degree in a given algebraic expression and differentiate whether given expression is a polynomial in one variable or not.
		Chapter 2 Polynomails	Zero of a Polynomial Exercise 2.2	finding zero of a polynomial
		Chapter 2 Polynomails	Zero of a Polynomial Exercise 2.2	finding zero of a polynomial
		Chapter 2 Polynomails	Factorisation of Polynomials Exercise 2.3	factorising polynomial using factor theorem
		Chapter 2 Polynomails	Factorisation of Polynomials Exercise 2.3	factorising polynomials using splitting the middle term method
		Chapter 2 Polynomails	Factorisation of Polynomials Exercise 2.3	factorising polynomials using division method
		Chapter 2 Polynomails	Factorisation of Polynomials Exercise 2.3	factorising polynomials using division method
		Chapter 2 Polynomails	Algebraic Identities Exercise 2.4	factorising using algebraic identities

		Chapter 2 Polynomails	Art integrated activity/ lab activity Algebraic Identities	prove algebraic identities
		Chapter 2 Polynomails	Algebraic Identities Exercise 2.4	factorising using algebraic identities
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		Chapter 2 Polynomails	Revision	to recall all the concepts of the chapter
		Chapter 2 Polynomails	Test	Assessment of students
<b>JULY</b>	<b>21</b>	Chapter 3 Coordinate Geometry	Introduction to Coordinate Geometry Exercise 3.2	Determine the x & y coordinate of a point from a graph and write the coordinates of the point
		Chapter 3 Coordinate Geometry	Cartesian System Exercise 3.2 Art Integrated Activity/ lab activity Street Plan(Exercise 3.1)	Representing Street plan graphically using cartesian system
		Chapter 3 Coordinate Geometry	Revision	to recall all the concepts of the chapter
		Chapter 3 Coordinate Geometry	Test	Assessment of students
		Chapter 4 Linear Equations in Two Variables	Introduction to Linear Equations Exercise 4.1	Recall concepts of coefficients and variables and construct a linear equation from a given statement
		Chapter 4 Linear Equations in Two Variables	Graphical solution of a linear equation (lab activity) Exercise 4.2	Plot the points on a graph and represent a linear equation in two variables
		Chapter 4 Linear Equations in Two Variables	Revision	to recall all the concepts of the chapter
		Chapter 4 Linear Equations in Two Variables	Test	Assessment of students
		Chapter 5 Introduction to Euclid's Geometry	Introduction to Euclid's Geometry Axioms and Postulates	Give examples of theorems, postulates and axioms and differentiate between them with the help of examples
		Chapter 5 Introduction to Euclid's Geometry	Euclid's 5 Postulates Exercise 5.1	Apply Euclid's postulates and prove basic geometrical concepts about lines, points, planes, shapes, etc.
		Chapter 5 Introduction to Euclid's Geometry	Art Integrated Activity Revision	to explain Euclid's axioms and postulates are universal truth to recall all the concepts of the chapter

AUGUST	18	Chapter 5 Introduction to Euclid's Geometry	Test	Assessment of students
		Chapter 6 Lines and Angles	Introduction to Lines and angles Basic terms Art integrated Activity/lab activity	recall the types of angles Define segment, ray, collinear points, non collinear points, acute angle, right angle, obtuse angle, straight angle, reflex angle, complementary angles, Supplementary angles and identify them in a given figure
		Chapter 6 Lines and Angles	Types of angles Exercise 6.1	Apply the concepts of linear pairs of angles and vertically opposite angles and establish relationships between the angles in a given figure and solve for missing values
		Chapter 6 Lines and Angles	Parallel lines Exercise 6.2	Label angles created by a transversal intersecting two parallel lines and identify corresponding angles, alternate angles, interior angles and define relationship between these angles and find unknown angles
		Chapter 6 Lines and Angles	Parallel lines Exercise 6.2	Find out the unknown angles created by a transversal in a given figure and infer if the lines are parallel or not
		Chapter 6 Lines and Angles	Revision	to recall all the concepts of the chapter
		Chapter 6 Lines and Angles	Test	Assessment of students
		Chapter 7 Triangles	Introduction to Congruency Art integrated activity	Observe the angles and sides of the given figures and find out whether they are congruent or not congruent  observing congruent objects in the surrounding
		Chapter 7 Triangles	Congruency Exercise 7.1	Illustrate the criteria of congruencies of triangles through diagrams (ASA, SAS, SSS, RHS) and prove relationships between given angles, sides and triangles of a given figure
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		Chapter 7 Triangles	Properties of Triangles Exercise 7.2	Apply criteria for congruence in a triangle with two congruent sides and prove that the angle opposite to the sides are equal and apply it in a given figure to solve for the measure of an angle
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SEPTEMBER	16	Chapter 7 Triangles	Properties of Triangles Exercise 7.2	Apply criteria for congruence in a triangle with two congruent sides and prove that the angle opposite to the sides are equal and apply it in a given figure to solve for the measure of an angle
		Chapter 7 Triangles	Congruency Exercise 7.3	Illustrate the criteria of congruencies of triangles through diagrams (ASA, SAS, SSS, RHS) and prove relationships between given angles, sides and triangles of a given figure
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		Chapter 7 Triangles	Revision	to recall all the concepts of the chapter
		Chapter 7 Triangles	Test	Assessment of students
		Revision	Revision for half-yearly	to recall all the concepts of the chapter
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		OCTOBER	18	Chapter 10 Heron's Formula
Chapter 10 Heron's Formula	Heron's Formula Exercise 10.1			Apply Heron's formula and calculate the area of a Triangle
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Chapter 10 Heron's Formula	Revision			to recall all the concepts of the chapter
Chapter 10 Heron's Formula	Test			Assessment of students
Chapter 11 Surface Area and Volume	Surface area of a cone Exercise 11.1			Visualize a right circular cone in 2-D and calculate the surface area (curved and total)
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Chapter 11 Surface Area and Volume	Surface area of a sphere and hemi-sphere Exercise 11.2	Calculate the surface area of a sphere /hemisphere to determine the cost of painting /covering the given surface of a sphere /hemisphere
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Chapter 11 Surface Area and Volume	Volume of a cone Lab activity	deriving volume of a cone formula from volume of a cylinder using activity
Chapter 11 Surface Area and Volume	Volume of a cone Exercise 11.3	Calculate the volume of a given cone and infer the quantity of any substance it can hold
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Chapter 11 Surface Area and Volume	Volume of a cone Exercise 11.3	Calculate the volume of a given cone and infer the quantity of any substance it can hold
Chapter 11 Surface Area and Volume	Volume of sphere and hemi-sphere Exercise 11.4	Calculate the volume of a given sphere and infer the quantity of any substance it can hold
Chapter 11 Surface Area and Volume	Volume of sphere and hemi-sphere Exercise 11.4	Calculate the volume of a given sphere and infer the quantity of any substance it can hold
Chapter 11 Surface Area and Volume	Volume of sphere and hemi-sphere Exercise 11.4	Calculate the volume of a given sphere and infer the quantity of any substance it can hold
Chapter 11 Surface Area and Volume	Volume of sphere and hemi-sphere Exercise 11.4	Calculate the volume of a given sphere and infer the quantity of any substance it can hold
Chapter 11 Surface Area and Volume	Revision	to recall all the concepts of the chapter

Chapter 11 Surface Area and Volume	Test	Assessment of students
Chapter 8 Quadrilaterals	Introduction to Types of Quadrilaterals Properties of Parallelogram	List the properties of quadrilaterals and classify real life objects into different types of Quadrilaterals
Chapter 8 Quadrilaterals	Properties of Parallelogram Exercise 8.1	Apply angle sum property of quadrilateral and find the value of the unknown angle
Chapter 8 Quadrilaterals	Properties of Parallelogram Exercise 8.1	Apply properties of parallelogram and find a) an unknown angle b) an unknown side
Chapter 8 Quadrilaterals	Properties of Parallelogram Exercise 8.1	Apply properties of parallelogram and find a) an unknown angle b) an unknown side
Chapter 8 Quadrilaterals	Properties of Parallelogram Exercise 8.1	Apply properties of parallelogram and find a) an unknown angle b) an unknown side
Chapter 8 Quadrilaterals	Mid Point Theorem( lab activity)	Prove the midpoint theorem of triangles using concepts of congruency and transversal angles and extend the application to quadrilaterals
Chapter 8 Quadrilaterals	Mid Point Theorem Exercise 8.2	applying mid-point theorem to find unknown sides
Chapter 8 Quadrilaterals	Mid Point Theorem Exercise 8.2	applying mid-point theorem to find unknown sides
Chapter 8 Quadrilaterals	Revision	to recall all the concepts of the chapter
Chapter 8 Quadrilaterals	Test	Assessment of students
Chapter 9 Circles	Introduction to Circles	Define radius, chord, diameter, segment (major and minor), arc (major and minor), interior & exterior of a circle and illustrate and label them on a given circle
Chapter 9 Circles	Angles subtended by a chord at the centre of a circle Exercise 9.1	Apply theorems regarding angle subtended by a chord in a circle and find the measure of an angle in the given figure
Chapter 9 Circles	Perpendicular distance of a chord from the centre (lab activity)	Apply the property of perpendicular from the center to the chord and solve for the missing values (lengths and angles) in a given figure
Chapter 9 Circles	Perpendicular distance of a chord from the centre Exercise 9.2	Apply the property of perpendicular from the center to the chord and solve for the missing values (lengths and angles) in a given figure
Chapter 9 Circles	Perpendicular distance of a chord from the centre Exercise 9.2	Apply the property of perpendicular from the center to the chord and solve for the missing values (lengths and angles) in a given figure

<b>DECEMBER</b>	<b>21</b>	Chapter 9 Circles	Angles subtended by an arc Exercise 9.3	Interpret and apply theorems on the angles subtended by arcs of a circle and solve for unknown values in given examples
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		Chapter 9 Circles	Cyclic Quadrilateral Exercise 9.3	Apply the relation between angles of a cyclic quadrilateral and solve for the value of a given angle
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		Chapter 9 Circles	Cyclic Quadrilateral Exercise 9.3	Apply the relation between angles of a cyclic quadrilateral and solve for the value of a given angle
		Chapter 9 Circles	Revision	to recall all the concepts of the chapter
		Chapter 9 Circles	Test	Assessment of students
<b>JANUARY</b>	<b>19</b>	Chapter 12 Statistics	<i>Introduction to Statistics</i>	recall the various methods to represent data
		Chapter 12 Statistics	Bar Graph Exercise 12.1	Identify an appropriate scale and labels and represent given data through a bar graph
		Chapter 12 Statistics	Histogram (art integrated activity)	representing data in the form of histogram
		Chapter 12 Statistics	Histogram Exercise 12.1	representing data in the form of histogram
		Chapter 12 Statistics	Histogram Exercise 12.1	representing data in the form of histogram
		Chapter 12 Statistics	Frequency Polygon Exercise 12.1	representing data in the form of frequency polygon
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		Chapter 12 Statistics	Frequency Polygon Exercise 12.1	representing data in the form of frequency polygon
		Chapter 12 Statistics	Revision	to recall all the concepts of the chapter
		Chapter 12 Statistics	Test	Assessment of students
<b>FEBRUARY</b>	<b>18</b>	Revision	Revision for Annual Exam	to recall all the concepts of the chapter