MATHEMATICS 7				
MONTH	**NO. OF PERIODS**	**TOPIC**	**SUB TOPIC**	**LEARNING OBJECTIVE**
APRIL	19	Chapter 1. Integers	*Whole Numbers and Integers *EXERCISE 1.1	*Differentiate between whole numbers and integers *Represent numbers with positive and negative signs and apply to various
		Chapter 1. Integers	*MULTIPLICATION OF INTEGERS *Properties of multiplication of integers *EXERCISE 1.2 *ART INTEGRATED ACTIVITY: Number line representation of Integers	*Apply rules of multiplication of integers and solve various arithmetic expressions and contextual problems *Apply properties of multiplication of integers and simplify arithmetic expressions
		Chapter 1. Integers	*MULTIPLICATION OF INTEGERS *Properties of multiplication of integers *EXERCISE 1.2	*Apply rules of multiplication of integers and solve various arithmetic expressions and contextual problems *Apply properties of multiplication of integers and simplify arithmetic expressions
		Chapter 1. Integers	MATHS LAB ACTIVITY: Number line pathways activity to represent integers on number line	to represent integers on number line
		Chapter 1. Integers	*Division of integers *Properties of division of Integers	*Infer division of integers as inverse operation of multiplication and write multiplication statement into corresponding division statement *Apply properties of division of integers and simplify arithmetic expressions
		Chapter 1. Integers	*Division of integers *Properties of division of Integers	*Infer division of integers as inverse operation of multiplication and write multiplication statement into corresponding division statement *Apply properties of division of integers and simplify arithmetic expressions
		Chapter 1. Integers	EXERCISE 1.3	Apply properties of division of integers and simplify arithmetic expressions
		Chapter 1. Integers	EXERCISE 1.3 *Revision of concepts	Apply properties of division of integers and simplify arithmetic expressions
		Chapter 1. Integers	Test	Assessment of students
		Chapter 2 Fractions & Decimals	Fractions EXERCISE 2.1	*Define proper, improper and mixed fractions and distinguish between them *Multiply (or divide) numerator and denominator with the same number and write equivalent fractions
		Chapter 2	explore the	Extend concept of multiplication as repetitive addition for fraction and

		Chapter 2 Fractions & Decimals	explore the multiplication/ division of fractions/decimals through pictures/paper folding activities /daily life examples	Extend concept of multiplication as repetitive addition for fraction and multiply a fraction and a whole
MAY	**19**	Chapter 2	EXERCISE 2.2	Multiply fractions involving the term 'of'
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		Chapter 2	MATHS LAB ACTIVITY: Paper grid to multiply	Visualise the multiplication of fraction
		Chapter 2	Division of fractions	*Invert a given fraction and find its reciprocal
		Chapter 2	EXERCISE 2.3	*Divide two fractions and find the smaller parts of the fraction
		Chapter 2	Revision of topic	to recall all the conceptts of Fraction
		Chapter 2	Test	Assessment of students
		Chapter 2	*Decimal Numbers	recall and apply concept of decimal representation and expansion and
		Chapter 2	MATHS LAB ACTIVITY:	Visualise the multiplication of decimals
		Chapter 2	*EXERCISE 2.4	Find the intersection of 2 decimal numbers on the grid and represent
		Chapter 2	Division of decimal numbers	*Divide decimal numbers by 10, 100 and 1000 and infer left shift in
		Chapter 2	Division of decimal numbers	Divide decimal number by a whole number and solve real life problems
		Chapter 2	Revision of topic	to recall all the concepts of Fraction
		Chapter 2	Test	Assessment of students
JULY	**21**		PT REVISION	to recall all the concepts
			PT REVISION	to recall all the concepts
		Chapter 3.	*Arithmetic mean	*Calculate average and represent the central tendency of the data
		Chapter 3. Data Handling	*EXERCISE 3.1	Finding Mean , median , Mode using coin and numbers
		Chapter 3. Data Handling	*MODE *Median *EXERCISE 3.2	*Calculate mode of the data and find the observation that occurs most often in the data set *Calculate median of the data and find the observation that lies in the middle of the data set
		Chapter 3.	*Drawing double bar graph	*Represent data using double bar graph
		Chapter 3. Data Handling	MATHS LAB ACTIVITY/ ART INTEGRATED ACTIVITY: Preparing bar graph to represent favorite food or *Preparing double bar graph of Marks *collect data from their classmates of their interest, and then represent the data visually.	*Represent data using double bar graph and compare and discuss two collection of data at a glance
		Chapter 3. Data Handling	EXERCISE 3.3 Revision of chapter	*Represent data using double bar graph and compare and discuss two collection of data at a glance
		Chapter 3.	Test	Assessment of students
		Chapter 4 Simple	*Setting up of an equation	*Write the statements in the form of equations
		Chapter 4 Simple	EXERCISE 4.1	*Write the statements in the form of equations

AUGUST	**18**	Chapter 4 Simple Equation	MATHS LAB ACTIVITY: Framing equations by giving particular situation ART INTEGRATED ACTIVITY: balance scales to depict the equality in equations and represent variables and constants	Will learn Framing equations
		Chapter 4 Simple	Solving an Equation	*Create a strategy and solve the given simple equation.
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		Chapter 4 Simple	More equations	*Explain the first step to be taken and separate the variable while solving
		Chapter 4 Simple	More equations	*Explain the first step to be taken and separate the variable while solving
		Chapter 4 Simple	Revision of topic	to recall all the concepts of Fraction
		Chapter 4 Simple	Test	Assessment of students
			PT REVISION	to recall all the concepts
			PT REVISION	to recall all the concepts
		Chapter 5 Lines	*Concepts of line, line segment and ray	*Recall the concept of line, line segment and angles and identify them
		Chapter 5 Lines	EXERCISE 5.1	Examine different angles and determine the measure of their complement
		Chapter 5 Lines	ART INTEGRATED ACTIVITY:	* Types of angles
		Chapter 5 Lines	*Transversal	*Describe adjacent angles and identify a pair of adjacent angles in the given
		Chapter 5 Lines	*Pairs of Lines	*Create a strategy and determine whether the given lines are parallel or
		Chapter 5 Lines	continued	*Create a strategy and determine whether the given lines are parallel or
		Chapter 5 Lines	Revision of topic	to recall all the concepts of Fraction
		Chapter 5 Lines	Test	Assessment of students
SEPTEMBER	**16**	Chapter 6	*Recall Types of triangles	Compare different triangles and classify them on the basis of their sides
		Chapter 6	EXERCISE 6.1 based on	*Describe median of a triangle and identify it for the given triangle
		Chapter 6	MATHS LAB ACTIVITY:	the type of triangle using |Geo board
		Chapter 6	EXTERIOR ANGLE OF A TRIANGLE AND ITS PROPERTY	Apply the exterior angle property of a triangle and find the measure of
		Chapter 6	*ART INTEGRATED ACTIVITY/ Lab Activity	verify Exterior angle property
		Chapter 6	Continued EXERCISE 6.2	Apply angle sum property of a triangle and find the measure of the
		Chapter 6	EXERCISE 6.3	Apply angle sum property of a triangle and find the measure of the
		Chapter 6	EXERCISE 6.3	Apply angle sum property of a triangle and find the measure of the
		Chapter 6	*TWO SPECIAL TRIANGLES : EQUILATERAL AND	SUM OF THE LENGTHS OF TWO SIDES OF A TRIANGLE Property
		Chapter 6	EXERCISE 6.4	SUM OF THE LENGTHS OF TWO SIDES OF A TRIANGLE Property
		Chapter 6 Triangles & its Properties	Revision of topic	to recall all the concepts of Fraction
			Revision for half-yearly	To recall previous topics
			Revision for half-yearly	To recall previous topics
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OCTOBER	**18**	Chapter 8	*What are rational numbers	*Define rational numbers and classify a number as a rational number
		Chapter 8	RATIONAL NUMBERS IN STANDARD FORM	*Simplify rational number such that there is no common factor between
		Chapter 8	Rational number between two rational number	Calculate and find rational numbers between any two rational numbers
		Chapter 8	ART INTEGRATED ACTIVITY/MATHS LAB ACTIVITY::	to visualise the Rational numbers
		Chapter 8	OPERATIONS ON RATIONAL NUMBERS	Apply the rules of rational numbers operations and
		Chapter 8	EXERCISE 8.2	Apply the rules of rational numbers operations and
		Chapter 8	Test	Assessment of students
		Chapter 7		*Convert denominators of fractions into 100 and represent them in
		Chapter 7	*Converting Percentages to Fractions or Decimals	Convert decimal numbers to percentage and make comparing of

Month	Days	Chapter	Topic	Learning Objectives
NOVEMBER	20	Chapter 7 Comparing Quantities	*Ratios to Percents *Increase or Decrease as Per Cent *PRICES RELATED TO AN ITEM OR BUYING AND SELLING	*Compare the units of the quantities and represent them in ratio *Calculate increase or decrease in quantity as percentage and examine change in quantity based on real life problems *Calculate cost and selling price and determine profit /loss percentage
		Chapter 7	ART INTEGRATED ACTIVITY/MATHS LAB	to find percentage by using grid
		Chapter 7 Comparing Quantities	Profit or Loss as a Percentage EXERCISE 7.2	**Calculate cost and selling price and determine profit /loss percentage
		Chapter 7 Comparing Quantities	SIMPLE INTEREST EXERCISE 7.2 Revision	*Understand the concept of simple interest and interpret real life problems
		Chapter 7	Test	Assessment of students
DECEMBER	21	Chapter 9	AREA OF A PARALLELOGRAM	find the perimeter and estimate the area of parallelogram
		Chapter 9	ART INTEGRATED ACTIVITY/	Deriving formula
		Chapter 9	EXERCISE 9.1	find the perimeter and estimate the area of parallelogram
		Chapter 9	CIRCLES	*Use direct or indirect measurements and describe the relationships
		Chapter 9	EXERCISE 9.2	Use direct or indirect methods to find the circumference of circle,
		Chapter 9	EXERCISE 9.2	Use direct or indirect methods to find the circumference of circle,
		Chapter 9 Perimeter & Area	ART INTEGRATED ACTIVITY/ Investigate different circumference of circles and compare them with their respective diameter and relate circumference to Pi. Revision of topic	to recall all the concepts of Fraction
		Chapter 9 Perimeter & Area	Test	Assessment of students
			PT REVISION	To recall previous topics
JANUARY	19	Chapter 10	INTRODUCTION	*Describe algebraic expressions and distinguish them from arithmetic
		Chapter 10	LIKE AND UNLIKE TERMS	*Examine the algebraic factors of the given terms and distinguish
		Chapter 10	ART INTEGRATED ACTIVITY/MATHS LAB ACTIVITY::	to show how identities works
		Chapter 10	*FINDING THE VALUE OF AN EXPRESSION	Use the given value of variable(s) and evaluate the algebraic
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		Chapter 10	Revision of topic	to recall all the concepts of Fraction
		Chapter 10	Test	Assessment of students
		Chapter 11 Exponents & Powers	INTRODUCTION EXPONENTS EXERCISE 11.1	*Describe exponential form of numbers and express numbers in exponential notation. *Examine the exponential form of the given number and identify its base and exponent. *Find prime factors of numbers and express them as the product of powers of prime factors

JANUARY	19	Chapter 11Exponents & Powers	EXERCISE 11.1	*Describe exponential form of numbers and express numbers in exponential notation. *Examine the exponential form of the given number and identify its base and exponent. *Find prime factors of numbers and express them as the product of powers of prime factors
		Chapter	LAWS OF EXPONENTS	*Apply laws of exponents and simplify a given expression
		Chapter	ART INTEGRATED ACTIVITY/MATHS LAB ACTIVITY::	Show how Exponents work
		Chapter	EXERCISE 11.2	*Apply laws of exponents and simplify a given expression
		Chapter	EXERCISE 11.2	*Apply laws of exponents and simplify a given expression
		Chapter 11Exponents & Powers	EXPRESSING LARGE NUMBERS IN THE STANDARD FORM EXERCISE 11.3 Revision	Represent large numbers in exponential form and read, understand and compare them easily
		Chapter	Test	Assessment of students
FEBRUARY	18	Chapter 12	*INTRODUCTION	*Give examples and non examples and describe symmetrical figures.
		Chapter 12	Rotational symmetry	*Give example(s) for rotational symmetry and describe their center of
		Chapter 12	LINE SYMMETRY AND ROTATIONAL	Examine the given figures and identify figures which have both line
		Chapter 12	Test	Assessment of students
		Chapter13	Introduction to Plane figures and solid shapes	*Discuss and give examples and differentiate between plane figures and
		Chapter13	ART INTEGRATED ACTIVITY/MATHS LAB ACTIVITY::	Build nets of 3D shapes and understand their properties
		Chapter13	DRAWING SOLIDS ON A FLAT SURFACE	Examine oblique sketches and visualize all the faces of a solid shape
		Chapter13	Visualising Solid Objects	Examine cross sections of different solid shapes and interpret and
			Test	Assessment of students
			Revision for Annual Exam	To recall previous topics
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