HANSRAJ MODEL SCHOOL
PUNJABI BAGH, NEW DELHI
CURRICULUM PLAN
SESSION: 2024-2025
CLASS: - IV
SUBJECT: MATHEMATICS

Month	Topic/ sub-topics	Learning Intentions (Learning Outcomes +Competencies)	Activities	Assignments
April	**Ch-1 NUMBERS UP TO 9,99,999** • Indian place value system. **Sub Topics** • Indian Place Value system. • Concept of Period, place, place value upto 999999. • Number names • Expanded form • Ordering of Numbers.	The learners: • understand and extend the numbers up to 9,99,999. • comprehend the concept of periods, place and place value in the Indian system of numeration. • analyze the relation between period, place and place value. • create the greatest and the smallest 6digit number with the given digits. • express the numbers in expanded form in 3 different ways • analyze, compare and arrange the numbers in ascending and descending order. • Display observations and recording skills while writing the number names. • showcase the skills of patience and team work during the class activity done.	**ART INTEGRATION** "NUMBER SLIDER" The learners will make a handy numeracy -Number slider to reinforce learning ,by using the colourful strips and showing different places and periods for a 6-digit number, to determine the place value, period and expanded form .	**A-1 Place value chart sheet** Pg. -12 WS-5 Q6(a,b,c f) **A-2 Number names**. Pg-12 Ws-5Q6(a,b,c,f) **A-3 Period , Place and Place value** Pg-12 WS-5 Q4 (a, d, e, f). **A-4 Expanded form (in two ways)** Pg-14 WS-6 Q2 (b, e) Q3 (d,g) **A-5 Ascending and Descending order** Pg-15 Q3 (a) Q4(c) BT pg 17Q10

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April/ May	**Ch-2** **ADDITION AND SUBTRACTION** Addition and subtraction of 6-digit numbers **Sub topics-** • Addition and Subtraction of 5-digit and 6-digit numbers with regrouping. • Properties of addition and subtraction • Oral Addition and subtraction • Word stories	The learners: • understand the concept of addition and subtraction of 5 and 6 digit numerals. • execute the addition and subtraction of 5 and 6 digit numbers. • implement the properties of addition and subtraction • relate the use of addition and subtraction in daily life situations and apply the concept learnt to solve the word stories. • identify and apply the concept of oral addition and subtraction with 10, 100, 1000 • comprehend, classify and solve the word stories. • Demonstrate the skills learnt so far through the activity. • resolve , decisive and analyze the operation used to solve the word stories	The learners will be solving the "CROSS WORD PUZZLE" sheet ,using the concepts of Addition and Subtraction to evaluate their knowledge and stimulate thinking capacity, and fastens up the learning capacity.	**A-6** Arrange and add- Pg. 20, WS-1 Q2 (d) , Q3(c) Pg 27 WS-5 Q.1(e) Q.2(d) **A-7** Pg-25, WS-4 Q1 (e) Pg 21 WS-1 Q.4 Pg -30 WS-8 Q1(c, d) **A-8** Case Study and Assertion and Reasoning sheet

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May	**Ch-3 MULTIPLICATION** Multiplication (3-digit and4-digit numbers by a 3- digit number) • Multiplication of 3 digit and 4-digit number by a 3-digit number. • Properties of multiplication • Word stories	The learners : • calculate multiplication of a 3-digit numeral by a 4-digit numeral.. • understand and apply the properties of multiplication. • execute oral multiplication by 10 ,100 ,1000. • comprehend word stories and solve it. • show collaborated efforts and foster teamwork while learning the activity. • analyze and explore the trick while learning	**ART INTEGRATION** The learners will solve the multiplication sums using the JAPANESE MULTIPLICATION TRICK.	**A-9** Pg -34 WS-1 Q2(f), Q3(b, f), Q4 **A-10** Word stories Pg -39 WS-4 Q1 (c, d)

July	**Ch- 4 DIVISION**
	  • Division of 4-digit number by 1-digit and 2-digit number
	  • Formula for checking of division
	  • Division of 4- 5-digit numbers by 2-digit number.
	  • Oral Division
	  • Word Stories
		The learners :
		• understand the methodology of long division.
		
		• execute the properties of division.
		
		• execute and implement a division sum and check by the help of formula.
		
		• express the quotient and remainder using oral division.
		
		• apply the concept of division in daily life situations through word stories.
		
		• Showcase the analytical thinking while creating the activity.
			ART INTEGRATION
			
			DIVISION BURGER " The learners will create their own Division Burger using the steps involved in division.
				A-11 Pg. 43 WS-2 Q1(f) Q2(c, e) Pg-44 WS-3 Q1(d, f)
				
				A-12 Pg-44 WS-4 Q 1(b) Q2(c, f)
				
				A-13 Pg46-47 WS-6
				
				Q1 (b, e f,)
				
				A-14 Case Study and Assertion and Reasoning sheet (Multiplication and division

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August	**Ch-5 LENGTH** Basic concepts and units of length Sub Topics- • Basic details of length. • Conversion of higher unit to lower units. • Conversion of lower unit to higher unit. • Addition of length, • Subtraction of length. • Word stories of length. **Ch-11 – PERIMETER** Closed and open figure and boundary of a closed figure Sub Topics- • Concept of perimeter • Measuring units • Formula to find perimeter of rectangle, square and triangle. Word stories.	The learners: • summarize the units of weight • understand their usage and implement • its SI units • evaluate and assess the conversion of units of weight. • analyse and calculate sums of addition and subtraction of units of weight and related word problems. • design and relate the concepts learnt in length while doing the activity showcasing the analytical thinking. The learners: • understand the concept of open and closed figures. • differentiate between different shapes. • understand and differentiate between the concept of perimeter and area. • importance of units. • Application of the formula to find the perimeter of any regular polygon. • develop analytical thinking and comprehend the problem sums. design and exhibit the creativity and learning while executing the activity	**ART INTEGRATION** **"FOLDABLES"** The learners will make the Foldables explaining the sub-concepts learnt in Length. **ART INTEGRATION** **"PERI-KITE"** The learners will find the perimeter of Tricoloured kite pasted on the A-4 sheet	**A-15** Pg- 52 WS-1 Q2 (d, e), Q.3(e, f), Pg.- 53 WS-2 Q1(g, h) Q.2(c) **A-16** Addition and Subtraction Pg.-54 ,55 WS-3 Q1(c, f), Q2 (d, f) **A-17** Pg. 56 WS-4 Q.1(b, e) **A-18** Pg. 108 WS-3 Q1(d,) b (ii), c **A-19** Pg. 108 WS-3 Q1(d, e,) Brain teasers Pg. 110 Q.3,6 **A-20** Case Study and Assertion and Reasoning sheet

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September	**Ch-14** **FUN WITH PATTERN** "Complete the pattern" Sub Topics: • rules to complete the pattern. • number tower	The learners: • analyze , explain and complete different types of patterns. • Develop observations and recording and analytical thinking while forming the patterns of numbers. • methodically use the concepts while solving patterns. • exhibit the creativity with verdict while executing the activity.	**ART INTEGRATION "NUMBER TOWER"** The learners will create a number towers using numbers cut-outs.	

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October	Ch – 6 -WEIGHT Sub-Topics- • Concept of Weight • Different units used to measure weight • Conversion of higher unit to lower units. • Conversion of lower unit to higher unit. • Addition and Subtraction • Word stories	The learner • summarize the units of weight • understand their usage and implement its SI units. • evaluate and assess the conversion of units of weight • analyse and calculate sums of addition and subtraction of units of weight and related word problems. • develop critical thinking, analytical thinking • display Problem solving, decision making, observation and recording	**Art Integration Activity –** **Balanced Diet Chart** The concept of weight permeates various aspects of life influencing science ,environment and health.A balanced diet for grandparents is crucial in managing chronic conditions like high blood pressure , heart disease and quality of life. The learners will do research and prepare a diet chart of lunch for their grand parents to fulfill their nutritional needs.	**A-1** Pg 58 Wk-1 Q2 (c,d,i), Q3 (d) **A-2** Pg 59 Wk-2 Q1(c,d,f) **A-3** wk-3,Pg 60 Q1.(d,f) Q2.(d,e) **A-4** wk-4 Pg 62 Q1 (b,d)

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October	**Ch – 7 – CAPACITY** Sub-Topics- • Concept of capacity • Different units used to measure capacity • Conversion of higher unit to lower units. • Conversion of lower unit to higher unit. • Addition and Subtraction • Word stories	The learners will • summarize the units of capacity • understand their usage and implement SI units. • evaluate and assess conversion of units of capacity • analyse and calculate sums of addition and subtraction of units of capacity and related word problems. • develop critical thinking, analytical thinking, • display Problem solving, decision making, observation and recording	**Art Integration Activity –** **Foldable** The concept of capacity is crucial in various contexts and facilitates effective resoures management and optimization To synthesize the concept of capacity , the learner will create a foldable – by folding the flaps of a sheet , a concise and informative summary of the concept of capacity.	**A-5** Pg64 Wk-1 Q1 (e,f) Q2 (d) **A-6** Pg65 Wk-2 Q1(b, d,f) **A-7** Wk-3 Pg 66 Q1 (d,f) Q2 (b, f) **A-8** Wk-4 Pg 67 Q 1 (b,c, d) **A-9** Case Study and Assertion &Reasoning Sheet of Weight & Capacity

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November **November**	**Ch-8** **TIME AND** **CALENDAR** Sub-Topics- • Basic details of clock and calendar. • Concept of leap year • Addition and subtraction of time with regrouping • Word stories **Ch – 9** **FRACTIONS** Sub-Topics- • Introduction • Equivalent Fractions • Equivalent Fractions from a given fraction	The learners will • understand and associate the concept of calendar to search day and date • assess that a given year is a leap year or not • analyse and calculate addition and subtraction of time with regrouping • calculate and solve word stories based on time • develop collaboration, interpersonal communication, analytical thinking • display problem solving, decision making management of data. The learner will • repeat and express fractions as part of a whole or collection of objects • identify and highlight the number of shaded parts and number of equal parts in a shape	**Art Integration Activity-** **Theme based Calendar** A calendar provides a comprehensive overview of the concept of calendar, covering their history , cultural significance and future prospects The learner will create a calendar for the birthday month of their parents/ friends birthday. Design it by choosing a theme and check their birth year for a leap year. **Art Integration Activity** **Fraction Cones** To reinforce the understanding of the concept of equivalent fractions, the learner will design a chart of fraction cones by pasting cone cutouts with a fraction written on it	**A-10** Pg 73 Wk-1 Q1 (b,c) **A-11** Pg 75 Wk-3 Q1 (b , f), Q2 (b) **A-12** Pg 76 Wk-4 Q1(b , d),Q2 (d) **A-13** Pg 77 Wk- 5 Q1(d ,e, f) Pg 79 Q 7 **A-14** Case Study Sheet and Assertion &Reasoning Sheet **A-15** Pg 84 Wk-2 Q.4 (b,f) Pg85 Wk-3 Q.3 in copy **A-16** Pg 85 Q1 (c,e) Q 2 (b)

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December	(Contd.) • Missing numerator and denominator of equivalent fraction • Check for equivalence of two fractions • Types of fractions • Fractions as division • Changing fractions – Mixed to improper and vice a versa	• represent equivalent fractions by paper folding and shading ● find missing numerator or denominator of Equivalent fractions ● examine for the equivalence of two fractions through cross multiplication method ● define and Categorize the types of fractions ● express a fraction as a division sum and vice versa ● convert a mixed number into improper fraction and vice-versa ● develop mathematical aptitude by applying the knowledge of fractions to their day to day life.	resembling ice cream cones and putting different colour cutouts on the cone resembling different flavours of scoops of ice cream with equivalent fractions written on each scoop of ice cream cutout.	A-17 Mind Map sheet will be given to recapitulate the types of fractions and Assertion &Reasoning Sheet A-18 Pg 91,Wk-7 Q.1 (c, f) Q.2 (b, f)
December	Ch- 10 ANGLES Sub-Topics- • Introduction to the concepts of angles • Measuring angles using a Protractor • Drawing of angles	The learner will • understand the meaning of an angle and identify its parts. • observe and execute the Illustration of usage of a protractor to measure any angle. • correlate and apply the use of a protractor in drawing of an angle • identify and categorize	Activity – Exhibiting Angles Visualizing angles through physical movements can make the concept more tangible and memorable. The learner will showcase /present different type of angles through different	A-19 Pg 98,Wk-3 Q.2(a,c,e, f)Pg 101,Q.5 A-20 Handout on mind map of types of angles will be give be given

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December	**Ch- 10 ANGLES** (Contd.)	• different types of angles. develop creative thinking , analytical thinking and observation (Contd.) • building oral communication, • adapt best usage of sources available	Yoga Poses and Dance forms in the class. **Art Integration Activity Design a name plate**. Illustrating various types of angles that can be found within any alphabet The learner will a design a beautiful name plate using ice cream sticks / ear buds using any two alphabets of his/her name and write the type of angle formed in each alphabet used	**A-21** Case Study and Assertion &Reasoning Sheet
January	**Ch- 12 AREA** Sub-Topics- • Introduction of the concept • Units to measure area • Formula of Area of a square and a rectangle • Word Stories	The learners will • understand the concept of enclosed surface • define and demonstrate area • recognize and relate the use of squares as the best unit for measuring area • interpret and calculate area of rectangle and a square using formula	**Activity –** **Map my state** Compairing the areas of different states can be a great way to summarize the concept of area and provides insights into the geographical diversity of India.	**A-22** Pg116 Wk-3 Q.2(b,d) Q.3(b)

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January **January**	**Ch- 12 AREA** (Contd.) **Ch-13 VOLUME** Sub-Topics- • Introduction of the concept • Units to measure volume • Formula of volume of a cube and a cuboid • Word Stories	• solve word stories • differentiate between area and perimeter • develop creative thinking, decision making and problem solving • build observation and manage data collection The learners will • understand the concept of volume • define and demonstrate volume • recognize and relate the use of cube as the best unit for measuring volume • interpret and calculate the volume of a cube and a cuboid using formula • solve word stories • differentiate between area and volume • develop perseverance, analytical thinking, creative thinking decision making, and problem solving • build observation and manage data collection • display of collaboration and teamwork	The learner will find of area of atleast 4 Indian states of their choice and arrange them in ascending order **Activity –** Understanding volume is essential for real-world applications **Build your box** The learner will make a cuboidal box using a given net an decorate it beautifully.	**A-23** Pg 116,Wk-3 Q.4;Pg 118 Q.4,Q.5 **A-24** Pg 124 Wk-3 Q2 (a) Q3 (b,c) **A-25** Pg 124 Wk-3 Q5, 6, Pg 125 Q 6 **A-26** Case Study and Assertion &Reasoning Sheet of Area & Volume