NAME OF THE DEPARTMENT -Mathematics   SYLLABUS BREAK UP 2021-22 -AJI

Name of the Subject Teacher: Sufiya Naz   **Grade: 4**

MONTH	WEEK	Unit/Section	No of Periods	Topic Break Down / for Periods/Learning objectives / progression	Learning Outcomes/ Skills acquired	Activities (Formative assessment tasks, projects, Visits) INCLUDING VIRTUAL LEARNING	Teaching Aids / Reference/ Resources	Competencies and Values	MY IDENTITY	Cross curricular link	Art Integration	Critical Thinking Objective	Critical Thinking Subjective	Artificial Intelligence
April	1 2 3 4	Large Numbers	15	Building numbers up to9,99,99 Indian place value chart Face value and face value of a digit in a Comparison and ordering of numbers. Successor and predecessor of a number. International place value chart. Number of numbers in between. Forming numbers. Rounding off numbers to the nearest Roman numerals.	REPRESENT numerals up to 6 INDICATE the place, place CONSTRUCT numerals with REPRESENT numerals up to Organising COMPARE AND Logical Reasoning ESTIMATE numbers to the	Math Lab Activity Compare and contrast Indian & Composing and decomposing of MCQ http://mycbseguide.com/onlinetest/c Mental Ability Test Interdisciplinary project Population of each emirate of UAE - Present the data on map of UAE. Representation of event dates Home Assignments	PPT/ VIDEO/ WEB LINK.	COLLABORATION &INDEPENDENT LEARNING / EMPATHY/ CARE/ HONESTY	Find out Arabic numbers from 1 to 10	ICT: Database Social & UAE: Population of UAE	Place Value Cards Rearranging cards and finding possible outcomes as asked Flyers Model Representing a number in various forms Puzzeles Applying knowledge in artistic questions by identifying the mathematical logic	Which of the following numbers comes between 798 and 978? CL - IX + D - XL = 570 + how many tens = 1000? Which of these numbers is the CLOSEST to 8700? How many beads should be removed from the hundreds' place in the abacus shown here if it has to represent a number between 650 and 750?	In a 4 × 100 m relay race, Shilpa runs the first 100 m in XXIII seconds. Ridhima runs the second 100 m in XIV seconds. Vandita runs the third 100 m in XVIII seconds and Shweta runs the final 100 m in XVI seconds. In how many seconds will they complete the race (in Roman numerals)? P, Q, R and S are four 4-digit numbers, each having the digit 9 only once and in the place shown. None of the other digits are known. What can be said with certainty about P, Q, R and S? P (9 _ _ _) Q (_ 9 _ _) R (_ _ 9 _) S (_ _ _ 9)	
May	1 2 3 4	Addition and Subtractionof Large Numbers	18	Addition & Subtraction of Large Understand the Properties of Addition& Finding the missing numbers Apply the Addition & Subtraction in Real Estimating sums & difference	Numeracy/ Organizing/ CARRYING OUT addition of CARRYING OUT subtraction VERIFY subtraction by	Math Lab Activity Make 3 x 3 magic squares using MCQ Multiplication Table test	PPT/VIDEO/ WEBLINK :	CRITICAL THINKING / COLLABORATION/ PROBLEM SOLVING	Find out the population of different emirates of U.A.E . Find the total population	ICT: Create PPT and Total length of roads in UAE Social & UAE: Population of UAE	Arrays station On square grid or graph paper depicting the result of addition of numbers Madhubani Art Draw using Madhubani art and find the total Place Value Cards Rearranging cards and finding possible outcomes while arranging cards in particular pattern Puzzeles Applying knowledge in artistic questions by	Which of the following is NOT equal to 54 + 23? Which of the following shows identity property ? If we start subtracting 5 from 24 stepwise as shown, we will be able to subtract 4 times. 24-5=19 19-5=14 14-5=9 9-5=4 (the process stops here as 4 is smaller than 5) If we start subtracting 7 from 143 in a similar manner, how many times	During the ramadan sale, Carrefoure attended the following number of customers. How many customers came together in all? A soap factory produced 2,692,654 soaps in one year. In the next year, it produced 867,205 more. How many soaps did the factory produced in the second year?	
June	1 2 3 4	Multiplication and Division of Large numbers	20	Properties of multiplication and division. Multiplication and division by 10/ 100/ Multiplication by 2digit/ 3digit Division by 1digit/ 2digit divisor. Multiplication and division in real life. Estimation in operations.	DEVISING the properties of PUT INTO PRACTICE PUT INTO PRACTICE Problem Solving DESIGNING real life problems APPLY the understanding of	Mental Math Test Home Assignments Mathletics − Order of Operations − Identifying errors in applying the	PPT/VIDEO/ WEBLINK:	CRITICAL THINKING / COLLABORATION/ PROBLEM SOLVING / EMPATHY/ CARE/ HONESTY/INTEGRITY	Find out the population of different Expatriates in UAE		Researcher Research and find the pattern related with multiplication table of 11 show it in the form of pyramid Arrays Array board On square grid or graph paper depicting the result of division of numbers Operational Flower In center of flower there is a number representing	What should be added to 7 × 42 to get 7 × 43? The product of the place values of two 2's in 428721 is? Estimate the product. Round the first factor to the What would be 9 more than 5 less than 25? Which pair of calculations gives TWO DIFFERENT ANSWERS? What is 19 - 18 + 17 - 16 + 15 - 14 +13 - 12?	Mrs Sharma (41 yrs) & Mr Sharma (45 yrs) with there 3 children (Priya - 17 yrs, Rita – 12 yrs, Rajat – 9 yrs) went to the exhibition. Shown here is the information about the entrance tickets to an exhibition. How much money did they spend on entrance tickets altogether? TICKET Children (12 yrs and Below) – Rs 50 Elders (Above 12 yrs of age) – Rs 75	
July August						**SUMMER VACATION**								
September	1 2 3 4	Factors and Multiples	12	Factors Tests of divisibility. Prime and composite numbers. Prime factorization of a number.. Multiples. L.C.M. - by finding common multiples,	Numeracy/ Reasoning skill PUT INTO PRACTICE the Analyse/ Compute/ Organise BREAK DOWN the numeral APPLY the understanding of APPLY the understanding of	Math Lab Activity Find prime numbers from 1 to 100 MCQ Formative Assessment task Represent prime factorization by Quiz Mental Math Test - Inter class Home Assignments	PPT/VIDEO/ WEBLINK :	CREATIVITY AND INNOVATION / COLLABORATION/ PROBLEM SOLVING / INDEPENDENT LEARNING/ CARE/ TOLERANCE	Which is the smallest prime number? Find out its relation with U.A.E	UAE&SOCIAL: Dates from the history SCIENCE: Derivation/ numerical ICT: Database	Find the prime and composite game Solving the puzzle to coloring prime and composite numbers differently and obtaining the artistic image	The sum of composite numbers coming just before and after 17 is? Twin prime number between 59 an 79 is?	Using the numbers from the box, find pairs that multiply together to get the number written below: (YOU CAN USE EACH NUMBER ONLY ONCE!) Which number to fill to make the number divisible and also that makes the number smallest / largest 76890_ ; by 2 10 6 3 8 4 2 3 4	
		Data Handling	9	Organizing and interpret pictograph. Reading bar graphs. Drawing a bar graph using data table	Graphic skill/ Data Analysis ORGANISE, DISPLAY AND Bar graph and pictograph	Visits/ Projects Collect data by VISIT to the junior Section M.C.Q http://mycbseguide.com/onlinetest/c Home Assignment Mathletics - Graph interpretations - Two dimensional bar graph	PPT/VIDEO/ WEBLINK :	CREATIVITY AND INNOVATION/PROBLEM SOLVING/ COLLABORATION/ INDEPENDENT LEARNING / TOLERENCE/ CARE	Draw some traffic signals and find out the relation with angles	ICT: Database UAE&SOCIAL: Geometry in day today life ARCHITECTURE: Architecture around UAE	Create a Bar graph and pictograph For the given data construct a bar graph Relate tally table with art Research and find an art which uses only lines in it	The graph shows the number of Pokemon cards that 5 children have. Who has exactly 200 cards more than Akshay? The following bar graph shows the marks obtained by Ramesh in different subjects in the Session Ending Examination-2012. What is the total marks obtained in all the five subjects?	Children of classess 1 to 5 have collected money to help victims of natural diasaster. The amount collected is listed below in the table. Make a pictograph using an appropriate key	
October	1 2 3 4	Geometry	24	INTERPRET the basic elements of Differentiate the pairs of lines. DEFINE an angle and IDENTIFY the Differentiate open and closed figures DEFINE a polygon and identify the IDENTIFY the various parts of the circle CONSTRUCT a circle using compass ANALYZE the properties of various DEFINE perimeter. DEDUCE the formulae to find the APPLY formulae to find the perimeter of SOLVE real life problems based on the	Logical Analysis UNDERSTAND the basic IDENTIFY the elements of an Classify/ Reasoning CLASSIFY the types of lines. Analysis/ Drawing skill CONSTRUCTING circles. Computation/ Problem Solving EXPLORE perimeter/. EVALUATE the perimeter,	Math Lab activity Observe the hands of a clock at Make rectangles of different Interdisciplinary Project Collaborate with ICT – prepare a Visits/ Projects Visits to the assembly point and Draw plan of your dream home – M.C.Q Home Assignments Problem Solving Mathletics	PPT/VIDEO/ WEBLINK :	INDIPENDENT LEARNING/ CREATIVITY AND INNOVATION/ DIGITAL COMPETENCE/ HONESTY/ CARE/ INTEGRITY/PROBLEM SOLVING / COLLABORATI	Draw some traffic signals and find out the relation with angles	UAE&SOCIAL: Geometry in day ARCHITECTURE: Architecture around ICT: Project work, ppt. ART: Tangrams	Paper Craft Draw and represent various polygons and geometric elements Use compass to design wonderful images Design 3D shapes with paper Toothpick craft Make any shape and find its perimeter Design an obstacle race On a square grid Design an obstacle race and find shortest distance			
November	1 2 3 4	Fractions	20	Types of fractions – proper, improper, Converting one type of fractions to Representing fractions on the number Comparing and ordering fractions.. Addition and subtraction of like Application in real life.	Numeracy/Drawing skill DISTINGUISH the different COMPARE AND ORDER like Analyze/ Compute/ organize OPERATE like/fractions over +/- Analyze/ Compute / Problem SOLVE problems related to	Math Lab Activity Make the dial of clock by paper Formative Assessment Task Types of fractions – pictorial Design a situation in class related Interdisciplinary project Amount of fresh water available on - Represent it as fraction	PPT/VIDEO/ WEBLINK :	INDIPENDENT LEARNING/ CREATIVITY AND INNOVATION/ DIGITAL COMPETENCE /	Draw a clock and mark the numbers in Arabic	ICT: Project work, ppt ART: Tangrams GEOGRAPHY:	Fraction card Design a card with all designs which can be represented in the form of fractions Fraction art Design your own painting keeping in mind the fractions related to it Paper/ Clay/ Blocks Craft Design using paper, clay or blocks which is easily			

Month	Week	Topic	No.	Content	Skills	Activities	Resources	Values	Cross-curricular Question	Integration	Project/Activity
	4					Recipe – ingredients in fraction. M.C.Q Home Assignment Problem Solving Mathletics		COMPETENCE/ HONESTY/ CARE/ INTEGRITY	Arabic	Clock Tower Al Ain	Design using paper, clay or blocks which is easily available Paper: Design a pattern Clay: Model various structures Blocks: Design a town
December	1 2 3 4	Time	5	Relationship between hours, minutes and Inter- conversion of 12-hour clock and Calculating time duration. Reading calendar. Counting days.	Measuring skills READ / RECORD time from Computation CONVERT 12 hour clock to vice versa. Computation/ Problem Solving COMPUTE start time/ end time/	Group Work Activity – elapsed time for an M.C.Q	PPT/VIDEO/ WEBLINK	CREATIVITY AND INNOVATION/P ROBLEM SOLVING/ COLLABORATI ON/	Which is the smallest prime number? Find out its relation with U.A.E	UAE&SOCIAL: Dates from the history SCIENCE: Derivation/ numerical	Design a clock Design a 3D clock with both 12- hour and 24 - hour numbers on the clock for better understanding and conversion
WINTER VACATION											
January	1 2 3 4	Money	6	Units of Money Currency used Operation of Money Money in Real Life	Numeracy Analyze/ Compute/ organize	Group Work Activity BILL MAKING (market Interdisciplinary project Personal finance - Understanding - Set up budget given a salary.	PPT/VIDEO/ WEBLINK :	CREATIVITY AND INNOVATION/ DIGITAL COMPETENCE/ INTEGRITY/	Draw a Pictograph showing different emirathies faviourites	STATISTICS: Survey/ interview/ ICT: Database, Project	Draw Identify various pictures, representations, diagrams on various currency and draw them Pictorial Conversation Covert to the other form and represent it by drawing
February	1 2 3 4	Measurements	10	Metric system. Conversion of metric units. Operations on metric measures.	Numeracy/ organizing/ LIST and identify the relation of CONVERT from one unit to Computation Computation (+/ - / ×/ ÷) on Problem Solving SOLVE problems on length, APPLICATION of average in	Project Work Find own height/ weight and Interdisciplinary project Tour around U.A.E - Routing and distance, km – m M.C.Q Home Assignment Problem Solving Mathletics	PPT/VIDEO/ WEBLINK :	CREATIVITY AND INNOVATION/ PROBLEM SOLVING / CARE/ TOLERENCE/ EMPATHY	Draw a U.A.E flag and find out the fractions for each colour	ART: Origami. UAE: UAE flag SCIENCE: Derivation/ UAE: Arabic dish recipe	Be an Artist Draw and represent 3 examples of each metric system Metric song Sing the metric song to remember all the units