



		NAME OF THE DEPARTMENT -Mathematics			SYLLABUS BREAK UP 2021-22 -AJI														
Name of the Subject Teacher: Samira and Sufiya		Grade: 5																	
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 to 9,99,99,999	REPRESENT numerals up to 8	Math Lab Activity	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 Math Crafts - Halloween Place Value Math Craftivity - Create different ways that you could represent a number. Use hands-on manipulatives as you create your representations or Rounding Roller Coaster	a. Which of these numbers is the CLOSEST to 8700? b. What is seven hundreds, plus thirteen tens? c. 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 )	a. If the alphabets A, E, T stands for 10,100, and thousand respectively, the decode the following codes to find the numbers they present. A. ATE B. EAT C. TEA b. Form the greatest and smallest 8- digit numbers with the digits 8,5, 2,4, 0,6,1. You can repeat one of the digits? c. Multiply D ( a roman numeral ) by the biggest roman numeral and write the number so obtained in Indian and International system of numbers? c. In a particular year 3452165 students participated in NSO. 6725401 participated in IMO and 3327642 participated in NCO, then how many total number of students participated if rounded off to nearest thousand? B. there are 24 rows of guava trees in a farm. each row has 415 trees. Trees of 5 rows are cut down. Find the total amount of remaining guava trees in the farm? c. Each floor of a high rise building is fixed with 20 doors. There are 12 floors in each building. There are 25 such buildings respectively. If they start tolling together, after what time will they next toll together? b. The art teacher has 120 crayons and 30 sheets of paper to give to her students. Find the largest number of students to whom she can give equal number of crayons and equal number of sheets of paper? c. Two bikes are riding a circular path. The first rider completes a round in 12						
				Addition and subtraction of large numbers	CARRYING OUT addition of 2	Make 3 x 3 magic squares using MCQ								PPT/VIDEO/ WEBLINK :	CRITICAL THINKING / COLLABORATION/ PROBLEM SOLVING / EMPATHY/ CARE/ HONESTY/ INTEGRITY	Find out the population of different emirates of U.A.E . Find the total population	ICT: Database Social & UAE: Population of UAE	Tessellations and multiplication	a. Raman School has a big fleet of 26 buses. If each bus has 58 seats, how many seats are there in all the buses totally? b. Twice a certain number is 58. Four times that number will be..... c. Find the difference between the place value of 5's in 257578 ? d. The smallest 6 digit number that can be formed using 9,2,6,0,3,1, (use each digit only once is.....
				Properties of addition and subtraction	Numeracy/ Organizing/	Math Lab Activity													
				Addition and subtraction of large numbers	CARRYING OUT subtraction	MCQ													
				Properties of multiplication and division	VERIFY subtraction by	Multiplication Table test													
				Multiplication and division by 10/ 100/	DEVISING the properties of														
				Multiplication by 2digit/ 3digit	PUT INTO PRACTICE														
				Division by 1digit/ 2digit divisor.	PUT INTO PRACTICE	Mental Math Test													
Multiplication and division in real life.	Problem Solving	Home Assignments																	
Estimation in operations.	DESIGNING real life problems	Mathletics																	
	APPLY the understanding of	– Order of Operations																	
		– Identifying errors in applying the																	
June	1 2 3 4	Factors and Multiples	20	Factors	Numeracy/ Reasoning skill	Math Lab Activity	PPT/VIDEO/ WEBLINK :	CREATIVITY AND INNOVATION/ PROBLEM SOLVING/ COLLABORATION/ INDEPENDENT LEARNING/	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	Rainbow Factor Or Factor ninja and Multiple monster	a. How many 3's occur in the prime factorization of greatest 3 digit number? b. Who am I? I am a composite number greater than 50, divisible by 3 and 17. I am also 4 less than a multiple of 5 and 11. c. Are all odd numbers prime? d. The smallest number divisible by 15, 20, 24, 32 and 36 is .....							
				Tests of divisibility.	PUT INTO PRACTICE the	Find prime numbers from 1 to 100													
				Prime and composite numbers.	Analyse/ Compute/ Organise	MCQ													
				Prime factorization of a number.	BREAK DOWN the numeral	Formative Assessment task													
				H.C.F – by finding common factors and	APPLY the understanding of	Represent prime factorization by													
				Multiples.	APPLY the understanding of	Quiz													
				L.C.M. – by finding common multiples,		Mental Math Test - Inter class													
				Relationship between L.C.M & H.C.F.		Home Assignments													
		Question Bank questions.																	
SUMMER VACATION																			
September	1 2 3 4	Geometry	12	Basic elements of Geometry – point, Types of lines – concurrent, collinear, Angles	Logical Analysis	Math Lab activity	PPT/VIDEO/ WEBLINK :	CREATIVITY AND INNOVATION / COLLABORATION/ PROBLEM SOLVING / INDEPENDENT LEARNING/ CARE/ TOLERANCE/ INDEPENDENT	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	perpendicular, and intersecting lines. Locate right, acute, and obtuse angles. Search for types of triangles. Basically, students played an "I Spy..." game. Or Geometry Family Tree Paper Craft Draw and represent various polygons and geometric elements Innovative Designs Use compass to design images	a. If a vertical line meet a horizontal line, the angle between the point of intersection is..... B. If two rays start from a point and go in the opposite direction, the angle between them is ..... c. Line AB is symbolically written as ..... d. The radius of a circle is second odd prime number. Then its diameter is .....	a. Akmias mother baked a circular cake. She fixed a ribbon around it for decoration. What does the length of the ribbon denote? B. Neha has three pieces of thread. She arranged the threads. She then observed that she has created various angles. Find out how many angles are formed ? c. answer the questions; 1. can a triangle be made with three collinear points. why? b. Can there be two right angles in a triangle?						
				Measuring angles.	Classify/ Reasoning	Collaborate with ICT – prepare a													
				Classification of angles.	CLASSIFY the types of lines.	Formative Assessment task													
				Constructing angles	CLASSIFY the types of angles.	Show various types of angles using													
				Polygons, triangle, circle.	CLASSIFY the types of	M.C.Q													
					Analysis/ Drawing skill														
					MEASURING and constructing	Home Assignments													
					CONSTRUCTING circles.	Question Bank questions.													
October	1 2 3 4	Time	24	Relationship between hours, minutes and Inter- conversion of 12-hour clock and Calculating time duration.	Measuring skills	Group Work	PPT/VIDEO/ WEBLINK :	DRAWING AND INNOVATION/ DIGITAL COMPETENCE/	Draw a clock and mark the numbers in Arabic	ICT: Project work, ppt ART: Tangrams GEOGRAPHY: Clock Tower Al Ain	Design a clock Design a 3D clock with both 12-hour and 24 - hour numbers on the clock for better understanding and conversion Also mark seconds and minutes in the clock								
				Reading calendar.	CONVERT 12 hour clock to vice versa.														
				Counting days.	COMPUTATION/ Problem Solving														
					COMPUTE start time/ end time/														
		Data Handling				Organizing data using tally marks.	Graphic skill/ Data Analysis	Visits/ Projects	PPT/VIDEO/ WEBLINK :	AND INNOVATION/ DIGITAL COMPETENCE	Draw a pie chart showing different emirates of U.A.E based on its area.	STATISTICS: Survey/ interview/ data collection. ICT: Database, Project work, ppt. ART:	Create a Bar graph and pie charts For the given data construct as asked Graph Paper Art Use the squares in graph paper to make an exciting pattern						
						Reading bar graphs.	ORGANISE, DISPLAY AND	Collect data by											
						Drawing a bar graph.	Bar graph/ pictograph and pie	VISIT to the junior Section											
						Circle graphs or pie charts.		M.C.Q											
November	1 2 3 4	Fractions	5	Types of fractions – proper, improper, Converting one type of fractions to Representing fractions on the number	Numeracy/ Drawing skill	Math Lab Activity	PPT/VIDEO/ WEBLINK	CREATIVITY AND INNOVATION/ PROBLEM SOLVING	Draw a U.A.E flag and find out the fractions for each colour	UAE: UAE flag SCIENCE: Derivation/ numerical UAE: Arabic dish recipe	Fraction Art - create a colourful art piece while learning about shape, symmetry & fractions! Investigate & explore the fraction pieces. Discuss equivalent fractions (how many eighths fit into a half?) & practice adding & subtracting fractions	a. Nagmas was facing south east. she made an anticlockwise turn and ended up facing south. The turn Nagma took is ..... B. Of the 185 children in Indian school of grade 5 , three fifth went to watch a 3-D film. how many children did not go? c. if x + 3/2 =4, then x is ..... d. The next fraction in the sequence 1/15, 1/45, 1/ 135 is .....	a. In an examination centre , there were 108 girls and 216 boys. What fraction of total students were girls? B. Froggy wants to cover a stream. the stream is 2 meters wide . On every jump Froggy covers one- third mere distance. In how many jumps will Froggy reach from rock A to rock B? c. A man complete one third of his work in an hour, in how many hours he can complete the whole work? d. A herd of cows gives 4 L of milk each day, but each cow gives one- third of total milk each day. They give						
				Comparing and ordering fractions.	Analyse/ Compute/ organize	Formative Assessment Task													
				Reducing fraction to its lowest terms.	OPERATE like/ unlike fractions	Design a situation in class related													
				Addition and subtraction of fractions.	Analyse/ Compute / Problem	Interdisciplinary project													
				Multiplication of fraction.	SOLVE problems related to	Amount of fresh water available on													
				Reciprocal of a fraction.		- Represent it as fraction													
				Division of fractions.		Recipe – ingredients in fraction.													
				Application in real life.		M.C.Q													
		Home Assignment Problem Solving																	
November- December	1 2	Decimals	20	Concept of decimal.	Numeracy	Formative Assessment Task	PPT/VIDEO/ WEBLINK :	COLLABORATION / CRITICAL THINKING / PROBLEM SOLVING	Find out the Arabic word for decimal and fraction	GEOGRAPHY/ UAE: Distance. SCIENCE: Nutritional	Fraction and Decimal Hundred Grid art								
				Place value of digits in a decimal number.	LABEL decimals on a number	Representation of Decimal Place													
				Expanded notation of decimal numbers.	COMPARE AND ORDER	Interdisciplinary project													
				Conversion decimals to fractions and		Amount of fresh water available on													
				Like and unlike decimals.	Analyse/ Compute/ organize	- Represent it as fraction.													
				Ordering of decimals.	CONVERT decimals to	- Represent it as decimal.													
						Mathletics													
						Home Assignment													
		Problem Solving																	

December	3 4	Money		Addition/ subtraction/ multiplication/ EXTEND the operations (+/-)	M.C.Q	PPT/VIDEO/ WEBLINK :	CARE/ INDIPENDENT LEARNING/ CREATIVITY AND INNOVATION/ DIGITAL COMPETENCE	component UAE: Proportionate scaling of UAE map. SCIENCE: Ratio of chemical values. UAE:	Prepare a bill including VAT	Design your result Read the question and answer it using drawing Show its profit or loss by drawings		
				Checking a bill and calculating bill	Numeracy						Group Work	
				Unitary method for finding the price of an	LABEL decimals on a number						Activity - PROFIT / LOSS/ BILL	
				Finding profit and loss.	COMPARE AND ORDER						Interdisciplinary project	
				Finding the cost price and selling price.							Personal finance - Understanding - Set up budget given a salary.	
WINTER VACATION												
January	1 2	Percentage	6	The concept of percentage.	Analyze/ Compute / Problem	PPT/VIDEO/ WEBLINK :	ON / CRITICAL THINKING / PROBLEM SOLVING CARE/ TOLERANCE	Find out the common occupations of U.A.E and find out how much percentage of VAT is applied	UAE: Offers of any supermarkets of UAE	Circle Graph Project. Students create a circle graph of the activities in which they participate over a 24 hour period		
				Relationship between fractions, decimals	CONVERT decimals &						Amount of fresh water available on	
				Applications of percentage in real life	APPLY percentage in real life						- Represent it as fraction. - Represent it as decimal. - Represent as decimal.	
											Project Work Find % of your SA1 marks and	
January - February	3 4 1	Measurement s	10	Metric system.	Numeracy/ organizing/	PPT/VIDEO/ WEBLINK :	INDIPENDENT LEARNING/PRO BLEM SOLVING  HONESTY	Find out the average population of different emirates of U.A.E	Tour around UAE (routing – km-m conversion). Estimated population of UAE.  P.E: BMI	Metric Tools Draw various metric tools used to represent 3 metric systems Metric song Sing the metric song to remember all the units		
					Conversion of metric units.						LIST and identify the relation of	Find own height/ weight and
					Operations on metric measures.						CONVERT from one unit to	Interdisciplinary project
					Average.						Computation	Tour around U.A.E
											Computation (+/- /x/÷) on	- Routing and distance, km – m
February	2 3	Perimeter and Area		Perimeter of a rectangle and square.	Measuring skills	/VIDEO/ WEBLIN	THINKING/ LOGICAL ANALYSIS / CREATIVITY / PROBLEM SOLVING  TOLERANCE/CA RE/ EMPATHY	Draw a U.A.E flag in a graph sheet and find out its perimeter and area	GEOGRAPHY/ UAE: Boundary, Area.  ICT: Project work.  ART: Designs.	Area Using Applied Math - own house design to find the area. or Design it to explain Represent perimeter, area and volume using drawings for understanding Toothpick craft Make any shape and find its perimeter		
					Standard units of area.						Measure and record length/	Math Lab Activity
					Area of rectangle and square.						Computation/ Problem Solving	Make rectangles of different
					Estimate area of irregular figures using						EXPLORE perimeter/ area/	Find the area of each part of a set
					Finding volume by counting unit cubes.						DEDUCE the formulas to find	Visits/ Projects
					Volume of a cuboid and a cube.						DEDUCE the formulas to find	Visits to the assembly point and
											EVALUATE the perimeter.	Formative Assessment Task
												Draw plan of your dream home –
												Area of a design drawn on grid
												M.C.Q Home Assignment Problem Solving Mathematics