



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

Subject :- MATHEMATICS				Grade:- 6								Critical Thinking Questions Objective	Critical Thinking Questions Subjective			
MONTH	WEEK	Theme and Sub-strand	Period	Progression statement (as per NCERT)	Learning Outcomes	MS Teams Virtual Learning Activities	Teaching Aids / Reference	Competencies and Values	MY IDENTITY	Cross Curricular Link	Art Integration			Artificial Intelligence		
APRIL	1	KNOWING OUR NUMBERS	6	Consolidates the sense of numberness up to 7 digits in terms of its size of estimation. Gets familiar with large numbers up to 9 digits. Solves word problems on large number operations. Understands the importance of brackets and other symbols like =, <, >	<ul style="list-style-type: none"> REPRESENT, read, write, compare, order, expand numerals up to 9 digits both in Indian and International system. INDICATE the place, place value and period of a digit in a numeral FORM numbers by shifting the digits. COMPARE AND CONTRAST both systems. 	<ul style="list-style-type: none"> Compare and contrast Indian & International system of numeration – represent in an innovative way. Interdisciplinary project Population of each emirate of UAE in Indian as well as International system of numeration. Present the data on map of UAE. 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> Arabic translation for 'numbers'. Numbers 1 - 10 in Arabic. Represent the population of each Emirate in Indian as well as International system of numeration on a UAE map. 	Social & UAE: Population of UAE. English: Singular- plural, countable. ICT: Database	Place Value Painting - "Several Circles" painting, this project requires students to represent place value with proportionately sized shapes such as squares and circles. Multiples of each shape reinforce the concept of expanded notation.	Maze of Word Problems Using Operations with Numbers	How many millions are there in 10 crores? A) 100 B) 10 C) 1 D) 100 What is number of zeroes that come after 1 in 10 crores? A) 6 B) 7 C) 8 D) 9 Raju is 22 years old and Ramu is 19 years old. How is the difference of their ages represented in Roman System? A) III B) XXDI C) XXXLII D) XXXLL What is the Roman numeral for the number obtained when 144 is divided by 16? A) X B) VII C) VIII D) IX The roman numeral for 1679 is	than 500. I am greater than 200. All my digits are odd. If you take each of my three digits and add them together, they equal 7. What am I? I am a palindrome (A palindrome reads the same forward and backward.131,1221 are examples of palindrome). I am greater than 35 and less than 75. I am an odd number. What am I? A student wrongly multiplied 8365 by 75 instead of 57. By how much was his answer greater than the correct answer? Do you need to do both the multiplications to solve the question?A construction company got a contract to build a highway. They built 92,926 m of the road by 21 May 2015. On 21 May 2015, they built 1,759 m of the road. About how many metres of the road, they built by 20 May 2015? Solution: $92,926 - 1,759 = 93,000 - 2,000 = 91,000$ m approximately The above example is a real life problem on estimating the difference of two large numbers. Create more such real life problems on a) estimating the difference of two large numbers. b) estimating the sum of two		
	2		6	Relates larger and smaller units of metric measures and converts one to another. Estimates sum, difference, product and quotients and verifies using approximation	<ul style="list-style-type: none"> CONVERT different units of metric measures. ROUND OFF numbers to the nearest 10/100/1000. USE estimation in arithmetic operations. 	<ul style="list-style-type: none"> Personal Measure converter – measure BMI (Pair work) 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> Tour around U.A.E - Routing and distance, km – m conversion. Round off the population of each Emirate to the nearest thousands in Indian system of numeration on a UAE map. 	UAE: Tour around UAE (routing – km-m conversion). Estimated population of UAE. English: Uncountable. P.E: BMI			UAE: Event dates of UAE. ICT: Research work SOCIAL: Dates from the history.	Factors and multiples line design project	Niharika earns ₹14579 each month by selling books. Which of the following is the best estimate in nearest thousands, she earns in 2 months? (A) ₹ 30,000 (B) ₹ 20,000 (C) ₹ 35,000 (D) ₹ 30,800 If 243145x is divisible by both 2 and 3, what is the value of x? a) 2 b) 3 c) 1 Subtract 29.375 from the sum of 85.75 and 5.9. (A) 62.275 (B) 63.275 (C) 64.275 (D) 65.275 At a school, there are 704 desks to place into 22 classrooms. If the equal number of desks is placed in each classroom, then how many desks will be there in each classroom? (A) 32 (B) 34 (C) 42 (D) 44 A vessel has 5 litres 120 millilitres of mango shake. How many glasses each of 40 ml. Write five pairs of prime numbers below 25 such that their sum is divisible by 10. capacity, can be filled with it? (A) 122 (B) 130 (C) 118 (D) 128 State 'True' or 'False' and state	
	3		3	Consolidate reading Roman numerals up to 3,999.	<ul style="list-style-type: none"> REPRESENT numerals up to 3999 in Roman Numeral System. 	<ul style="list-style-type: none"> Interdisciplinary project Representation of event dates (History) by Roman Numerals –Individual Task MCQ http://mycbseguid.com/onlineest/class-06-mathematics-knowing-our-numbers/1613/ 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> Represent event dates (From the History of U.A.E) by Roman Numerals. 	UAE: Event dates of UAE. ICT: Research work SOCIAL: Dates from the history.						UAE: Create expressions using UAE formation day. ICT: Research work SCIENCE: Derivation/ numerical.
	MAY	4	PLAYING WITH NUMBERS	3	Solve problems involving more than one operation and then to appreciate the hierarchy to be decided to carry on different operations - BODMAS.	<ul style="list-style-type: none"> PERFORM Mathematical operations in correct order - BODMAS 	<ul style="list-style-type: none"> Research WORK – Explore through net and prepare a fact sheet on Symbols of grouping can be used to override the usual order of operations. 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> UAE FORMATION DAY – Create an expression using a variety of operations with brackets 		UAE & SOCIAL: Dates from the history. SCIENCE: Derivation/ numerical.				
				2	Formulates divisibility rules of 2, 3, 4, 5, 6, 8, 9, 10 & 11 and uses them as and when required.	<ul style="list-style-type: none"> PUT INTO PRACTICE the rules of divisibility 	<ul style="list-style-type: none"> Check the divisibility. 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> Check the divisibility of the year of events (From the History of U.A.E) 			SCIENCE: Derivation/ numerical. ICT: Ppt.			
		1	Classification of numbers as even, odd, prime, co-prime, etc.	<ul style="list-style-type: none"> FIND factors and multiples of numbers and analyse their properties. IDENTIFY prime and composite numbers. 	Find prime numbers from 1 to 100 by Sieve of Eratosthenes method.	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> Relate prime numbers from 1 - 10 with special dates/ numbers in the history of UAE. (Eg: 2 - UAE national day, 7 - Number of Emirates, ..) 	UAE & SOCIAL: Dates from the history. SCIENCE: Derivation/ numerical. ICT: Database							
2		Understands the significance of HCF and LCM and finds them. Applies prime factorization to find HCF and LCM of numbers.	<ul style="list-style-type: none"> BREAK DOWN the numeral into its prime factors. APPLY the understanding of factors to list prime & composite numbers / find H.C.F. APPLY the understanding of multiples in finding L.C.M. SOLVE problems on L.C.M & H.C.F 	<ul style="list-style-type: none"> Show prime factorization by factor tree – Chart work (Group work) MCQ http://mycbseguid.com/onlineest/class-06-mathematics-playing-with-numbers/1615/ 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> Three different signals in Al Ain city take 50sec, 55sec and 60sec long intervals. If the signals start together at a particular time, at what time will they start together again? 	At a park, Ashwin intends to hire a buggy to help him get around more easily. The given table shows the rate for hiring a buggy. Every additional hour and part thereof Deposit First hour 24 12								
3	WHOLE NUMBERS	5	By observing patterns, identifies and formulates rules for whole numbers. Evolves the properties of whole numbers like commutative, associative, distributive, additive identity, multiplicative identity, etc.	<ul style="list-style-type: none"> IDENTIFY natural numbers and whole numbers. ILLUSTRATE properties of whole numbers. 	Verify that addition and multiplication is commutative for whole numbers, by paper cutting and pasting.	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	<ul style="list-style-type: none"> Research on 'the invention of zero in the number system introduced in the history of UAE'. 	SCIENCE: Derivation/ numerical. ICT: Database	At a park, Ashwin intends to hire a buggy to help him get around more easily. The given table shows the rate for hiring a buggy. Every additional hour and part thereof Deposit First hour 24 12						

JUNE	4	5	<ul style="list-style-type: none"> Evolves the properties of whole numbers like commutative, associative, distributive, additive identity, multiplicative identity, etc. 	<ul style="list-style-type: none"> REASON OUT the existence of properties of whole numbers over $+/-/x/÷$. APPLY different properties of basic operations on whole numbers. 	<p>Project Work Prepare a Manual on - The existence of properties of whole numbers. (Individual Task)</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	<ul style="list-style-type: none"> Show the existence of properties of whole numbers over $+/-/x/÷$ by taking men and women population of Abudhabi as data. 	SCIENCE: Derivation/ numerical. ICT: project work	project	numbers 10 Ashwin intends to hire the buggy from 9:15 a.m. to 2:15 p.m. How much does he have to pay? (A) 66 (B) 46 (C) 52 (D) 76 Aryan	students stand in row. Find the minimum number of rows formed if there are 960 students. The product of two numbers is 455. If one of the number is 65,	
	1	5	<ul style="list-style-type: none"> Integer Number line Ordering Integers Absolute Value Addition of integers 	<ul style="list-style-type: none"> UNDERSTAND the concept of negativity. REPRESENT positive and negative numbers and connect to daily life. DEFINE integers. IDENTIFY integers and their opposites LABEL/ REPRESENT integers on number line. COMPARE and ORDER integers ADD two or more integers. 	Perform addition and subtraction of integers using different coloured buttons/ counters. *Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	<ul style="list-style-type: none"> Research on 'the rate of growth (positive and negative) of different type exports of UAE'. 	ECONOMICS & UAE: Research on 'the rate of growth of different type exports of UAE'. HISTORY: A.D & B.C. GEOGRAPHY/SCIENCE: temperature	Project – Visualizing Our World - Creating a visual representation of above and below sea level or ground level. Students need to know that they will be responsible for placing 20 objects in their picture each with an appropriate integer label.	AI Integer Problem Solving Task Cards with QR Codes	A car was driven 50 km due north of Delhi at 10:00 and then 70 km due south. How far from Delhi was the car finally? Vinod chose a number that is smaller than -7, larger than -10 and is even. What number did Vinod choose? Find the value of $-26 - 20 + 33 - (-33) + 24 + 21 - (-25) - 26 - 14$. (A) 60 (B) 56 (C) 50 (D) 24 Sneha is counting by 3's. If she starts counting at -30, what is the sum of two missing numbers? $-30, -27, -24, -21, ?$	On a particular day, the temperature of Delhi at 10:00 a.m. was 13°C but by the mid night, it fell down to 6°C. The temperature of Chennai at 10:00 a.m. on the same day was 18°C but fell down to 10°C by the mid night. Which fall is greater? A shopkeeper had a profit of Rs. 50 on Monday, a loss of Rs. 20 on Tuesday and a loss of Rs. 18 on Wednesday. Find his net profit or loss in these three days? During a week in the month of January, a place in the Himalayan region recorded the following temperatures: -3°C, -6°C, 2°C, 0°C, -4°C, 1°C and
2	5	<ul style="list-style-type: none"> Subtraction of integers Multiplication of integers Division of integers 	<ul style="list-style-type: none"> SUBTRACT more than two integers. MULTIPLY integers. DIVIDE integers. APPLY the understanding of the rules in $+/-/x/÷$ of integers to SIMPLIFY. 	<p>* M.C.Q - http://mycbseguide.com/online-test/class-06-mathematics-integers/1618/</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	<ul style="list-style-type: none"> Research on 'the rate of growth (positive and negative) of different type exports of UAE'. Find the total growth/ increase in growth/ decrease in growth etc. 	SCIENCE: Derivation/ numerical ICT: Database, Project work			sasha is using a wooden strip 9/16 m long to make a picture frame. If she cuts off a piece that is 3/8 m long, which fraction best represents the portion that is left of the original strip? (A) 13/8m (B) 15/16m (C) 3/16 m (D) 1/8m There were 180 members in the club last year. The membership decreased by 20% this year. How many members decreased this year? (A) 12 (B) 25 (C) 36 whose numerator and denominator are made of odd digits only. In my simplest form, my representation as mixed number is 6 1/3. The sum of my numerator and denominator is 66. What fraction am I?	The heights of Jaya, Sabina, Sanju and Rohit are 1.61 m, 162 cm, 1600 mm, 1640 mm. An astronaut who weighs 86 kg on the Earth would weigh 14 1/3 kg on the moon. Write it as an improper fraction. respectively. Who is the tallest of them all? Shalini wants to buy a pair of shoes worth 1,499.99. She has only 1,100.50 with her. How much more money does she need to be able to buy the pair of shoes? Rohan had 36 pens. He gave 15 of them to Mike and 11 of them to Karan. What fraction of his original 36 pens does Rohan is left with? Write two equivalent fractions for that amount. About 3/5 of the world's population lives in Asia and the people of Europe make up about 3/25 of the world's population. What fraction	
JUNE	3	4	<ul style="list-style-type: none"> Types of fractions – proper, improper, mixed, like & unlike and equivalent fractions. 	<ul style="list-style-type: none"> DEFINE fraction with illustration. CLASSIFY the different types of fractions (proper/ improper/ mixed/ unit/ like/ unlike fractions). DEFINE an equivalent fraction DETERMINE whether the given fractions are equivalent or not. DERIVE equivalent fractions for a given fraction. 	Make the dial of clock by paper folding (skill of dividing a circle into 12 equal parts) * Types of fractions – pictorial representation (Individual Task) *Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	<ul style="list-style-type: none"> Represent as fraction of each colours in a UAE flag. 	UAE: UAE flag SCIENCE: Derivation/ numerical	Butterfly Fractions To add or subtract fractions the butterfly way Or Create a piece of Fractal Art - Create a piece of Fractal Art by selecting a shape and then measuring fractals of that same shape onto other pieces of paper and cutting them out.	AI Problem Solving Approach on fractions	There were 180 members in the club last year. The membership decreased by 20% this year. How many members decreased this year? (A) 12 (B) 25 (C) 36 whose numerator and denominator are made of odd digits only. In my simplest form, my representation as mixed number is 6 1/3. The sum of my numerator and denominator is 66. What fraction am I?	The heights of Jaya, Sabina, Sanju and Rohit are 1.61 m, 162 cm, 1600 mm, 1640 mm. An astronaut who weighs 86 kg on the Earth would weigh 14 1/3 kg on the moon. Write it as an improper fraction. respectively. Who is the tallest of them all? Shalini wants to buy a pair of shoes worth 1,499.99. She has only 1,100.50 with her. How much more money does she need to be able to buy the pair of shoes? Rohan had 36 pens. He gave 15 of them to Mike and 11 of them to Karan. What fraction of his original 36 pens does Rohan is left with? Write two equivalent fractions for that amount. About 3/5 of the world's population lives in Asia and the people of Europe make up about 3/25 of the world's population. What fraction
	1	5	<ul style="list-style-type: none"> Converting one type of fractions to another. Representing fractions on the number line. Comparison of fractions. Reducing fraction to its lowest terms (simplest form). 	<ul style="list-style-type: none"> CONVERT improper fraction to mixed fraction. CONVERT mixed fraction to improper fraction. REPRESENT fractions on a number line. REDUCE the fraction to its lowest terms. COMPARE like fractions/ unit fractions/ fractions with same numerator/ unlike fractions. 	<p>* Interdisciplinary project Recipe – ingredients in fraction.</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	<ul style="list-style-type: none"> Prepare an Arabic dish recipe. (Ingredients must be shown in fraction). 	UAE: Arabic dish recipe SCIENCE: Derivation/ numerical			There were 180 members in the club last year. The membership decreased by 20% this year. How many members decreased this year? (A) 12 (B) 25 (C) 36 whose numerator and denominator are made of odd digits only. In my simplest form, my representation as mixed number is 6 1/3. The sum of my numerator and denominator is 66. What fraction am I?	The heights of Jaya, Sabina, Sanju and Rohit are 1.61 m, 162 cm, 1600 mm, 1640 mm. An astronaut who weighs 86 kg on the Earth would weigh 14 1/3 kg on the moon. Write it as an improper fraction. respectively. Who is the tallest of them all? Shalini wants to buy a pair of shoes worth 1,499.99. She has only 1,100.50 with her. How much more money does she need to be able to buy the pair of shoes? Rohan had 36 pens. He gave 15 of them to Mike and 11 of them to Karan. What fraction of his original 36 pens does Rohan is left with? Write two equivalent fractions for that amount. About 3/5 of the world's population lives in Asia and the people of Europe make up about 3/25 of the world's population. What fraction
JUNE	2	5	<ul style="list-style-type: none"> Conversion from unlike to like fractions. Addition and subtraction of fractions. Solve problems on computation of fractions. 	<ul style="list-style-type: none"> CONVERT unlike fractions into like fractions by finding L.C.M ANALYZE and ORGANIZE unlike fractions in ascending/ descending order. COMPUTE fractions – Add/ Subtract like/ unlike fractions. SOLVE problems involving addition and subtraction of like fractions. 	<p>* Problem solving involving addition and subtraction of fractions. *Collins Assessment Exercise</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	<ul style="list-style-type: none"> Represent the men, women and kids population in ABUDHABI emirate as fraction. 	UAE & STATISTICS: Population. SCIENCE: Derivation/ numerical			What should be added to 24.057 to get 30? b) What should be subtracted from 45 to get 19.528? Fill in the blanks. a) $3.49 + \frac{\quad}{\quad} = 5$ b) 8.4 lies between $\frac{\quad}{\quad}$ and $\frac{\quad}{\quad}$ whole number An ant went 4 m 26 cm up a tree, then it came back 2 m 30 cm down. How high is it now from the ground? Which of the following makes the sentence true? (a) $>$ (b) $<$ (c) $=$ (d) None of these. How many numbers with two decimal places between 4.5 and 5.5 contain digit 6?	What should be added to 24.057 to get 30? b) What should be subtracted from 45 to get 19.528? Fill in the blanks. a) $3.49 + \frac{\quad}{\quad} = 5$ b) 8.4 lies between $\frac{\quad}{\quad}$ and $\frac{\quad}{\quad}$ whole number An ant went 4 m 26 cm up a tree, then it came back 2 m 30 cm down. How high is it now from the ground? Which of the following makes the sentence true? (a) $>$ (b) $<$ (c) $=$ (d) None of these. How many numbers with two decimal places between 4.5 and 5.5 contain digit 6?
	3	6	<ul style="list-style-type: none"> Decimal Fractions. Decimal Place value/ decimal expansion Expanded notation of decimal numbers. Conversion decimals to fractions and vice versa. 	<ul style="list-style-type: none"> DEFINE decimals and RELATE it to fractions. CONNECT between decimal fractions and decimal numbers. CONNECT between decimal numbers and place value. READ and WRITE decimals. CONVERT fractions to decimals. CONVERT fractions to decimals by converting the denominator to multiples of 10. CONVERT decimals into fractions. 	Represent decimal numbers using a 10 x 10 grid. * Representation of Decimal Place Value Chart – chart work (Individual Task) *Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty * COLLABORATION / CRITICAL THINKING/ PROBLEM SOLVING * CARE/ TOLERANCE	<ul style="list-style-type: none"> Prepare a chart on 'nutritional components (with decimal) present in AIAIn Milk' 	GEOGRAPHY/ UAE: Distance. SCIENCE: Nutritional component, Derivation/ numerical	Decimal/ fraction circle art - Use the decimal circle to create their own artwork using fractions of their choosing. Use at least one set of fractions with non-terminating decimals to evaluate if they understand the location of these numbers on the number line.	AI PROBLEM SOLVING APPROACH on Decimals	What should be added to 24.057 to get 30? b) What should be subtracted from 45 to get 19.528? Fill in the blanks. a) $3.49 + \frac{\quad}{\quad} = 5$ b) 8.4 lies between $\frac{\quad}{\quad}$ and $\frac{\quad}{\quad}$ whole number An ant went 4 m 26 cm up a tree, then it came back 2 m 30 cm down. How high is it now from the ground? Which of the following makes the sentence true? (a) $>$ (b) $<$ (c) $=$ (d) None of these. How many numbers with two decimal places between 4.5 and 5.5 contain digit 6?	What should be added to 24.057 to get 30? b) What should be subtracted from 45 to get 19.528? Fill in the blanks. a) $3.49 + \frac{\quad}{\quad} = 5$ b) 8.4 lies between $\frac{\quad}{\quad}$ and $\frac{\quad}{\quad}$ whole number An ant went 4 m 26 cm up a tree, then it came back 2 m 30 cm down. How high is it now from the ground? Which of the following makes the sentence true? (a) $>$ (b) $<$ (c) $=$ (d) None of these. How many numbers with two decimal places between 4.5 and 5.5 contain digit 6?
SEPTEMBER	4	6	<ul style="list-style-type: none"> Like and unlike decimals. Compare and Order decimals. Operations on Decimals. Problems involving decimal computation. 	<ul style="list-style-type: none"> DIFFERENTIATE like and unlike decimals. CONVERT unlike decimals to like decimals. COMPARE the decimals. COMPUTE decimals – decimal addition/ subtraction. SOLVE real life problems involving computation of decimals on addition and subtraction. 	<p>* Interdisciplinary project Amount of fresh water available on the Earth - Represent it as fraction. - Represent it as decimal. * Project Work Find % of your SA1 marks and analyze the data to prepare a self-evaluation report on your performance.</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	*Digital competence, Self confidence, Care, honesty	<ul style="list-style-type: none"> Prepare a grocery bill. Amount in Dirhams and fills. VAT amount also must show in it. 	SCIENCE: Amount of fresh water available on Earth in %, Derivation/ numerical ICT: Database, Project work			A milk seller has two drums of milk containing 40.75 L and 19.5 L of milk. Find the total quantity of milk with him. He sells 60 L of milk. What quantity of milk is left A squash ball weighs 24000 mg, a cricket ball weighs 45 g, a basket ball	A milk seller has two drums of milk containing 40.75 L and 19.5 L of milk. Find the total quantity of milk with him. He sells 60 L of milk. What quantity of milk is left A squash ball weighs 24000 mg, a cricket ball weighs 45 g, a basket ball

OCTOBER	1	INTRODUCTION TO ALGEBRA LINEAR EQUATIONS	6	<ul style="list-style-type: none"> • INTERPRET new concepts like variable, co-efficient, constant and algebraic expression. • WRITE the coefficient of the terms of an algebraic expression. • FRAME algebraic expressions for statements involving addition, subtraction, multiplication and division. • INTERPRET new concepts like base, exponent/ power of a variable. • PERFORM the operations in an expression. • DIFFERENTIATE like and unlike algebraic terms. • IDENTIFY the different types of algebraic expressions. 	<ul style="list-style-type: none"> * Project Work Create your own pattern using match sticks *Collins Assessment Exercise 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment T.	Digital competence, Self confidence,Care, honesty	* Using the concept of variable, find the numerical values that varies, e.g. cost of living in UAE (Price and inflation).	ECONOMICS & UAE: Cost of living of UAE. SCIENCE: Derivation/ numerical ICT: Project work	Patterning and Algebra - Identify, extend, and create a repeating pattern involving two attributes (e.g. size, colour, orientation, number) using a variety of tools (e.g. pattern blocks, attribute blocks, drawings). Graphing Linear Equations From a Table Art Activity	In a class room there are 3x rows of benches. If each row has 4xy benches and each bench can accommodate x students, determine the number of students in the room if it is full upto its capacity. (A) 6x 3y (B) 12x 2y (C) 12x 3y (D) 16x 4y Kartik is k years old. Rehaan's age, r, is 6 less than 2 times Kartik's age. Which of the following equations best represents Rehaan's age? (A) $r = (6 - 2)k$ (B) $k = 2r - 6$ (C) $r = 2k - 6$ (D) $k = (6 - 2)r$	The number of bacteria in a culture is x now. It becomes square of itself after one week. What will be its number after two weeks? Leela is Radha's younger sister. Leela is 4 years younger than Radha. Can you write Leela's age in terms of Radha's age? Take Radha's age to be x years.	
	2		6	<ul style="list-style-type: none"> • DIFFERENTIATE between an equation and an expression. • FORM simple equations from given statements. • SOLVE equations by trial and error method. • SOLVE equations by systematic method – balancing the equation & method of transposing. 	<ul style="list-style-type: none"> * Research work Origin and facts about Algebra. 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment EO	Digital competence, Self confidence,Care, honesty	* Research on the origin of the word ALGEBRA (Al Jabr).	HISTORY: Arab Mathematicians. SCIENCE: Derivation/ numerical ICT: Project work. ART: Patterns.				Decision Making:- Personalizing Algebra to Students' Individual Interests
NOVEMBER	1	PERIMTER AND AREA	5	<ul style="list-style-type: none"> • DEFINE perimeter. • CALCULATE perimeter of irregular polygons. • DEDUCE the formulae to find the perimeter of a square and a rectangle. • APPLY formulae to find the perimeter of a square/ rectangle/ equilateral triangles to solve problems. • SOLVE real life problems based on the concept of perimeter. 	<ul style="list-style-type: none"> * Project: Draw and colour a beautiful design/ picture on a graph paper. - Calculate its perimeter. - Prepare a presentation. *Collins Assessment Exercise 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	* Perimeter in Arabic? – word search (share the findings) * Research to find the sketch of any one of the parks of UAE to find its perimeter.	GEOGRAPHY/ UAE: Boundary. ICT: Project work. ART: Designs. ARCHITECTURE: Sketch	Create a 3 x 3 array of square tiles and determine the perimeter and the area. The perimeter was determined to be 12 and the area determined to be 9. From there, students were given a number of different challenges to reduce the area but maintain the perimeter of 12	To estimate the total floor area of the apartment (including the terrace and the walls), of each room, calculate the area of each one and add all the areas together.	Ms. Neha needs to replace the batteries in 20 calculators. Each calculator uses 5 batteries. The batteries are sold in package of 25. How many package of batteries does Ms. Neha need to buy? (A) 64 (B) 4 (C) 80 (D) 5 Abhay found the area of a square to be 36 square metres. Which of the following could be used to find the length (l) of one edge of the square? (A) $l^2 = 6 \times 12$ (B) $l^2 = 12 \cdot 6$ (C) $l^2 = 6 \times 6$ (D) $l^2 = 6 \times 2$ Vipul Electronics Store is having a sale. To advertise the sale, the store manager wants to decorate the store door and window with colourful ribbon. How many	
	2		5	<ul style="list-style-type: none"> • DEFINE area and the unit of measurements of area. • DEDUCE the formulas to find area of square and rectangles. • APPLY formulae to find the area of a square and rectangle to solve problems. • SOLVE real life problems based on the concept of area. 	Find the area of palm on a grid paper (find approximate area of irregular shapes) * Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence,Care, honesty	* Approximate area of 'Global Village, Dubai' - search & share the findings.	GEOGRAPHY/ UAE: Area. ICT: Project work. ART: Designs. ARCHITECTURE: Sketch				
	3		4	Area and perimeter	<ul style="list-style-type: none"> • COMPARE and CONTRAST perimeter and area • REASON OUT when to use perimeter and when to use area in real life problems. 	* M.C.Q - http://mycbseguide.com/onlinetest/class-06-mathematics-mensuration/1622 * Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment .	Digital competence, Self confidence,Care, honesty	* Compare the perimeter and area of any one of the parks of ALAIN.				GEOGRAPHY/ UAE: Boundary, Area. ICT: Project work. ART: Designs. ARCHITECTURE: Sketch
	4		5	<ul style="list-style-type: none"> * Ratio/ equivalent ratios. * Comparison of ratios. * Ratios in its simplest form. 	<ul style="list-style-type: none"> • STATE the meaning of ratio and properties of ratios. • FIND equivalent ratios. • COMPARE ratio. • EXPRESS ratios in the simplest form. 	* M.C.Q http://mycbseguide.com/onlinetest/class-06-mathematics-mensuration/1624 * Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	* Digital competence, Self confidence,Care, honesty	* Find the ratio of each colours in a UAE flag. * Find the ratio of men and women population in ABUDHABI emirate.				STATISTICS, UAE: Ratio of colours in UAE flag, men-women population
	1	RATIO AND PROPORTION	4	<ul style="list-style-type: none"> * Proportion. * Missing terms in a proportion. 	<ul style="list-style-type: none"> * Interdisciplinary project Proportionate scaling of actual distance on UAE map. - Routing and distance, km – m conversion 	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment		* Project Proportionate scaling to actual distance on UAE map. - Routing and distance, km – m conversion	UAE: Proportionate scaling of UAE map. SCIENCE: Ratio of chemical values.	Determine ratio for paint mixing	The ratio of story books in the library to other books is 8 : 7. The total number of story books is 800. The total number of books in library is _____. (A) 350 (B) 450 (C) 1200 (D) 1500 A bus travels 126 km in 3 hours and train travels 315 km in 5 hours, then the ratio of their respective speeds is _____. (A) 2 : 5 (B) 2 : 3 (C) 5 : 2 (D) 25 : 6	on a Sunday to that of the whole week of a grocery shop was 2 : 9. If the total sale of eggs in the same week was Rs 360, find the sale of eggs on Sunday. The ratio of copper and zinc in an alloy is 9 : 7. If the weight of zinc in the alloy is 9.8 kg, find the weight of copper in the alloy. A family of 4 members consumes 6 kg of sugar in a month. What will be the monthly consumption of sugar, if the number of family If it has rained 276 mm in the last 3 days, how many cm of rain will fall in one full week (7 days)? Assume that the rain continues to fall at the same rate. Shubham's age today is 12 years and his father's is 42 years. Shubham's mother is younger	
	2		3	* Unitary Method	<ul style="list-style-type: none"> • SOLVE problems using unitary method. 	* Group Work Activity – FIND THE 'BEST BUY'. * Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	*Digital competence, Self confidence,Care, honesty	* Project FIND THE 'BEST BUY' in one of the offers of any supermarkets of UAE for an item.				UAE: Offers of any supermarkets of UAE

DECEMBER	3	BASIC GEOMETRICAL IDEAS	6	Differentiates between different geometrical figures on the basis of their observable properties. Classifies figures as Open and closed. Identifies interior and exterior of closed figures. Describes line, line segment, ray, curvilinear and linear boundaries. Classifies angle into different types on the basis of their measurement and describes elements of angle like vertices, arms, interior and exterior.	<ul style="list-style-type: none"> • INTERPRET the basic elements of Geometry. • Differentiate the pairs of lines. • DEFINE an angle and IDENTIFY the elements of an angle. 	<p>Interdisciplinary Project Collaborate with ICT – prepare a power point presentation 'symmetry in UAE and around the world'. * Origami</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	Prepare a power point presentation 'symmetry in UAE - Sheikh Zayed Mosque, Abudhabi.	UAE: Symmetry in UAE. ICT: Project work, ppt. ART: Origami.	Use math tools to create art Parallel & Perpendicular Art	Mathematising the situation: AI Approach
				JANUARY	2	UNDERSTANDING ELEMENTARY SHAPES	5	Describe the properties of a polygons and classification of polygons. Describes vertices, sides, angles, interior and exterior, altitude and median of a triangle. Understands the difference between different quadrilaterals as trapezium, parallelogram, rectangle, square, rhombus. Understands circle and its components Like centre, radius, diameter, arc, sector, chord, segment, etc.	<ul style="list-style-type: none"> • DEFINE a polygon and identify the elements of a polygon. • DIFFERENTIATE regular and irregular polygons. • IDENTIFY the elements of a polygon. • CLASSIFY polygons based on sides. • UNDERSTAND the basic facts about quadrilaterals such as adjacent sides/ angles, opposite sides/ angles. • IDENTIFY the different types of quadrilaterals such as square, rectangle, parallelogram, rhombus, trapezium and kite. 	Observe the hands of a clock at different times in a day and record types of angles formed in each case between the two hands * Tangrams. * Types of polygons up to 10 sides – with pictorial representation.	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty CREATIVITY
3	DATA HANDLING	5	Understands the use of organizing data. Uses tally marks to organise data. Represents data through pictograph.					<ul style="list-style-type: none"> • COLLECT and RECORD data through tally tables and read from graphs to answer direct questions. • INFER from the table and answer questions based on the tally table. • ORGANIZE data in two dimensional 	<p>* Project: Collect data by SURVEY/INTERVIEW to make bar graph/ pictograph</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	* Prepare a presentation on 'Parts of a Circle' - CLOCK TOWER, ALAIN.
FEBRUARY	1	CONSTRUCTIONS	4	Illustrate the components of circles, including centre, radius, diameter, arc, sector, chord, segment, semicircle, circumference, interior and exterior. Construction of a circle/ angle/ perpendicular Bisector/ Angle bisector	<ul style="list-style-type: none"> • READ and INTERPRET the data from bar graphs. • DISPLAY large data through bar graphs. • CHOOSE scale appropriately 	Create a bar graph in excel for your sa1 marks (all 9 subjects) and analyse the data to prepare a self-evaluation report on your performance. *Collins Assessment Exercise	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty	* Collect data by SURVEY/INTERVIEW people in UAE to make bar graph/ pictograph (healthy food/ junk fod)	STATISTICS: Survey/ interview/ data collection. ICT: Database, Project work, ppt. ART: Origami.		
				2	CONSTRUCTIONS	3	Constructs angles of different measures using compasses.	<ul style="list-style-type: none"> • MEASURE / CONSTRUCT the angles using protractor. • Draw lines/ circles/ angles/ perpendicular bisector/ angle bisector. 	<p>* Formative Assessment task Show various types of angles using toothpicks (individual work). *Collins Assessment Exercise</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment	Digital competence, Self confidence, Care, honesty CARE	* Construct the model of Road/ traffic symbols seen in UAE.
	4				<ul style="list-style-type: none"> • CONSTRUCT 60° and 120° using compass and ruler. • CONSTRUCT 30°, 45° and 90° by the understanding of angle bisector. 	<p>* Interdisciplinary Project Math-integrated art activity - GeomARTry – (opportunities for students to use and interpret geometry vocabulary and apply)</p>	Laptop/Desktop, Task Sheets through assignments, PowerPoint Presentations, Videos, MS Forms for Assessment		* Find the angle of measurements in traffic symbols of triangular/ circular/ octagonal shapes.	UAE: Road/ traffic symbols seen in UAE. ART: GeomARTry (opportunities for students to use and interpret geometry vocabulary and apply)		