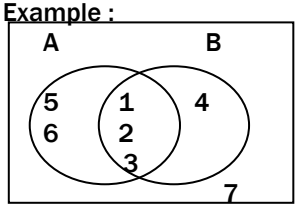
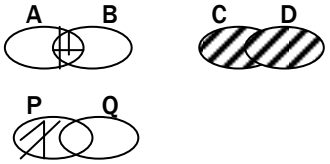
MATHEMATICS SCHEME OF WORK FOR PRIMARY SIX TERM I, 2024

WK	PD	TOPIC	SUB-TOPIC	CONTENT	COMPETENCES		METHODS/ TECHNIQUES	T/AIDS	LIFE SKILLS& VALUES	T/L ACTS	REFERENCE	REMARKS
					LANGUAGE	SUBJECT						
	11and22	SETS	TYPES OF SETS	**Equal sets** - Have same type and number of members. **Example** A = {2 , 3, 4, 5} B = {3 , 2, 5, 4} Sets A and B are equal sets. **Equivalent sets** – Have same number of element but may be of different type examples. A = {1, 2, 3, 4, 5} B = {a , b, c, d,e} Sets A and B are equivalent. **Intersection Set** (U) A set of members common to two or more given sets. Example : A = {0,2,4,6} B = {1,2,3,5} Set AnB = {2} Union Set (U) – A set of all elements contained in given sets.	A learner reads the words such as equal , equivalent intersection and union connects. Constructs oral sentences using the words above.	A learner - Counts elements in given sets. - Forms new sets	Question and answer Discussion Explanation	Charts Chalkboard illustration Plastic bottles	Critical thing Analitical thinking Confidence	A learner - Forms sets - Identifies sets	A new MKMTC bK 6 Pg 1 - 5	
	23		TYPES OF SETS	Universal sets (∑) Is the biggest set from which other small sets can be obtained. Example :  Find (i) ∑= 1,2,3,4,5,6,7} (ii) A = {1,2,3,5,6} (iii)B=(1,2,3,4) iv) AnB={1,2,3} v) AUB= {1,2,3,4,5,6}	A learner - Scribes a universal set. - Identifies members of the universal set	A learner - Reads the word universal - Uses the word universal in sentences.	Explanation Chalk board illustrations. Question and answer	Chart Chalkboard illustration	Problem solving Critical thing fluenc	A learner Draw venn diagram	A new MKMTC BK 6 Pg 4 – 5	

	3	4			A learner - Describes complement of sets	A learner - Reads the				A learner - Draws venn diagram	-do- Pg 4 – 7	
	4 55										A new MK MTC pupils BK 6 Pg 8 - 10	
	66		**Shading and describing shaded regions**	Shading and describing shaded regions 	A learner - Identifies shaded parts. - Shades required regions of sets.	A learner -describes the shaded region -reads the questions confidence	Chalk board illustrations Discussion Explanation Question and answer	A chart Chalk board illustrations.	Problem solving Critical thinking confidence	A learner -Draw venn diagram -Shades required regions -Identifies shaded regions	-do- Pg 59 - 60	

	61		Interpreting elements in terms of numbers		A LEARNER - Describes information.	A LEARNER - Draws venn diagrams - Represents	- Discussion - Explanation - Discovery methods	- Chalk board illustrations	Problem solving Creative thinking Appreciation	Drawing venn Diagram Adding numbers	A new MK Primary MTC 2000 BK 6 Pg 29	
	72		Showing number of elements on a venn diagram						Problem solving Critical thinking confidence	Drawing venn diagram Adding numbers Subtracting numbers	Mk bk pg 29	
	83		Word problem in venn diagrams. With simple probability	venn diagram. Find ∑ = 30 N(M) = 20 n(F) = 15 20 – x 2 x 15 – x		diagrams - Represents information - Solve equations			Critical thinking Problem solving Effective communication	Drawing venn diagram Reading and interpreting Information	A new MK Primary MTC 2000 (old edi	

				b) Find those who like both. 20 – x + x + 15 – x + 2 = 30 20 + 15 + 2 – x = 30 37 – x = 30 37 – 37 – x = 30 – 37 -x = -7 -1 -1 X = 7 If the teacher picked a pupil at random what is the chance that that pupil takes only one kind							tio n) Pgs 18 - 19	
	94		Place values of whole numbers	Place values of whole numbers up to millions. 1 2 3 4 5 6 7 Ones Tens Hundreds Thousands Ten thousands Hundred thousands Millions	A LEARNER - Read the different place values and uses them orally	A LEARNER - Write place value of the required digits .	Discussion Question and answer Explanation	Chart Chalk board illustrati on	Creative thinking Effective commun ication fluency	A LEARNER Gives the place value of digits	-do- 34 - 35	
	5	Wh O L e n umb e r	Forming numeral using given digits	Forming numbers using given digits. Example : Write down the largest numeral and smallest numeral using the digits 6 , 2 , 5 , 9 Largest numeral = 9,652 Smallest numerals = 2,569	A LEARNER Reads the numerals formed from digits	A LEARNER Identifies digits in order	Discussion Question and answer Explanation	Chart Chalk board illustrati ons	Effective commun ication Critical thinking	Learners Forms numeral	Mk bk pg 36	
	6		Values of whole number	Values of whole numbers Find the value of 8 in the numeral 5482 Tens 8 x 10 = 80 Find the sum of the values of 4 abd 5 in the figure above (5482) Value of 4 = 4 x 100 = 400 = 400 Value of 5 = 5 x 1000 = 5000 Sum = 5000 +400 5400	A LEARNER Reads place values of digits Multiples digits by their place values	A LEARNER Identifies place values of given digits Multiplies digits by their respective place value	Discussion Explanation Questions answer	Chalk Chalk board Illustrati ons	Creative thinking Interpers onal relations hip	A LEARNER Write place value of given digit (s) Multiples numbers Adds values of different digits	-do- Pg 35 (Ne w edi tio n)	
	11		Expanding whole numbers	Expanding whole number a) Using values Example: 247 = 200 + 40+ 7 b) Using place values c) 247 = (2 x 100)+(4 x 10) + (7 x 1)	A LEARNER Assigns powers to digits in a numeral	A LEARNER Gives another name for powers	Discussion Explanation	A chart Chalk board illustrati		A LEARNER Expands whole numbers	A ne w MK MT	

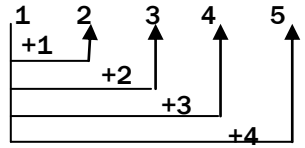
				d) Using powers (exponents) e) 247 = (2 x 10^2) +(4 x 10^1) + (7x10^0)	Expands whole number		Question and answer	on		Assigns power to different digits on a numeral	C BK 6 Pg 58	
	1 2	Wh O L e Num b E R s	Writing expanded numbers in short	Writing expanded numbers in short What number has been expanded below. a) 8000 + 400 + 2 8000 400 + 2 8,402 b) (7 x 100) + (3 x 1) 700 + 3 703 c) (5 x 10^3)+(2 x 10^1)+(4 x 1) (5 x 10 x 10x10) + (2x10)+(4x1) 5000 + 20 + 4 5000 20 + 4 5,024				Chart Chalk board illustration	Critical thinking Effective communication	A LEARNER Expands numbers with powers Get the value for expanded parts Adds up values	Mk bk pg 59	
	3		Writing whole numbers in words and figures					counters Chalk board illustration	Effective communication Critical thinking Appreciation	A LEARNER Identifies place values of the required digit	Pg 59	
		4	Rounding off whole numbers	Round off whole numbers Round off 347 to the nearest tens. H T O 340 347 = 350 3 4 7 +10 350 Round off the following to the nearest place value in brackets. i) 34894 (hundreds) ii) 5433 (hundreds)	A LEARNER Identifies digit in the given place value. Adds borrowed digits to original digits.	A LEARNER Read the place value given correctly and uses them to round of numbers	Discussion Chalk board illustration	Chart Chalk board illustrations	Problem solving Critical thinking Fluency	A LEARNER Identifies the place value of the required digits	-do- Pg 27	
		5	Place values of decimal	Place values of decimal numbers. 2 4. 3 7 1	A learner Identifies decimal		Discussion Chalk board	Chart		A LEARNER Identifies the place		

				Ones → thousands Hundredths → Tens → tenths	place values		illustration	Chalk board illustrations		value of the required digits		
		6	Values of decimals	Values of decimal digits Find the value of 8 in the number 0 . 283 Hundredths $8 \times \frac{1}{100} = \frac{8}{100} = 0.08$ Find the sum of the values of the digits 2 and 3 in 0.283. Value of $2 = 2 \times \frac{1}{10} = \frac{2}{10} = 0.2$ Value of $3 = 3 \times \frac{1}{1000} = \frac{3}{1000} = 0.2$ Sum = 0.2 + 0.003 = 0.203	A learner Identify place value of required digits. Multiplies digits by their place values	A learner Reads the new words fluently Writes figures correctly	Counters Chart showing values	Discussion Chalk board illustration	Problem solving Interpersonal relationship Fluency	A learner Write place values of digits Multiplies digits by fractions Adds decimals		
		1	Expanding decimal numbers	Expanding decimal numbers. a) Using values. 0.278= 0.2 + 0.07+0.008 b) Using place values 8.125 = $(8x1)+(1x\frac{1}{10})+(2x\frac{1}{100})+(5x\frac{1}{1000})$ c) Using powers (exponents) $0.481=(1x10^{-1})+(8x10^{-2})+(1x10^{-3})$	A learner Assigns power to decimal digits Expands decimals number	A learner Describes place values of digits Uses the given vocabulary correctly	Chalk board illustrations	Discussion Explanation Question and answer	Problem solving Effective communication Appreciation	A learner Expands decimal numbers	Mk pg 29	
		3	Writing decimals in words	**Writing decimals in words** The word "AND" implies a decimal point when writing decimals in words. Examples" 8.125 Eight and one hundred twenty five thousandths. Examples 2. 0.24 Twenty four hundredths	Identifies place values of digits	Spells the words used correctly Pronounces fluently Writes words correctly	Chart Word cards	Discussion Guided discovery	Effective communication Critical thinking Fluency	A learner Writes figures in words correctly	Mk pg 29	
		4	Rounding off decimal numbers	Rounding off decimal numbers Round off numbers of the nearest place value in the brackets. a) 0.4 (tenths) + 0. 1 0.5 b) 3.432 (hundredths) 3.43	Identifies the asked place value Rounds off correctly	Reads the questions correctly	Flash cards work cards counters	Guided discovery Discussion explanation	Critical thinking Effective communication confidence	Adding numbers correctly	Pg 30	

				0.00 3.43								
		5	Hindu Arabic to roman numeral							Expanding hindu numerals Writing roman numerals	MTC revision handbook pgs 28 - 30	
		6	Roman numeral to Hindi Arabic							Expanding numbers Writing hindu numerals	-do-	
	Bases1	Whole numbers	Bases Review of place values Changing from non-decimal to decimal base	Place values of non-decimal bases a) 1101_{two} , b) 1213_{four} and others Converting from non-decimal to decimal base a) 111two to base ten b) 21three to base ten Seven to base ten Expand using the exponents of the given base and find a single value	Reads the words and structures correctly	Identifies the base given correctly Expands the numbers correctly	Discussions Guided discovery Think pair share	Charts Counters Chalkboard illustrations	Confidence Appreciation Effective communication	Writing new words Counting values Reading new words	Mkbk 7 pg 45	
		2	Changing a decimal to non - decimal	**Changing decimal base to non – decimal** a) 12_{ten} to base two b) 213_{ten} to base five c) 34_{ten} to base four Divide the no. using the asked base only Form groups and write on remainders from each group formed **Change a non-decimal to a non**	Pronounces the word fluently	Divides the figures correctly	Guided discovery Discussion Explanation	Counters Work cards	Creative thinking appreciation	Identifying the bases given Converting the given base to base ten	Pg 45	

				decimal a) 12three to base five b) 26seven to base four Convert to decimal base the finally change the answer to the asked base								
		3	Addition of non-decimal bases	**Addition of non-decimal base** The biggest digit in any base should always be smaller than base your operating Regroup in the given base Add: 2 4 1five b) 23four 1 2 4five 12four	Reads the answers after the correct operation	Adds the figures correctly Subtracts the figure correctly	Guided discovery Think pair share Explanation	Charts Counters	Confidence Appreciation Problem solving	Reading new words Writing figures and new words Counting Adding numbers under a given base	Mk bk 7 pg 47	
		4	Subtraction of non – decimal base	Subtraction of non – decimal bases Follow the right place values In case of borrowing, use the given base a) 32five b) Subtract 52seven 14five from 66seven	Reads the answers after the correct operation	Subtracts the figures correctly Subtracts the figure correctly	Guided discovery Think pair share Explanation	Charts Counters	Confidence Appreciation Problem solving	Reading questions Subtracting figures	Pg 47	
	s	Whole numbers	Bases, Multiplication of non – decimal bases	Multiplication of non – decimal bases The answers written should have digits less than the base given If the figure is greater than the base, use the base to divide and write the remainder than carry the number of groups, continue normally +3 34five x4five 301five	Reads the figures in correctly in the given base Spells the words in their right way	Multiplies the figures correctly	Explanation Demonstration Group discussion	Charts Counters Work cards	Critical thinking Problem solving	Counting Reading new words Writing new words Multiplying the figures in the bases given	Km bk 7 pg 48	
			Finding unknown base	Finding the unknown. Find the value of p in $24_{six} = 42_{p}$	Writes the figures and words correctly	Expands and simplifies the unknown bases	Guided discovery	Counters	Problem solving Confidence	-counting - writing		
			indices	Laws of indices Simplify: $5^4 \times 5^2$	Reads the given words	Deduces and uses the laws of indices	Critical thinking	counters	Guided discovery	counting		

		OPERATION OF NUMBERS	Addition of whole number	Addition of large whole numbers up to 7 digits 3058768 (2) 4821481 + 431231 +3149353 3489999 7970834	Reads the new words	Arranges figures vertically Adds the numbers correctly	Discussion Explanation Question and answer	Chart Chalk board illustration	Problem solving Effective communication	Writes an exercise by adding whole numbers A arranging digits vertically Adding figures	Mk bk pg 49	
			Subtraction of large numbers.	Subtraction of large numbers a) 3241780 b) 3241784 -1120420 34525 21210420 3207259	Reads the new words confidently Forms simple structures from the give words	Arranges the digits correctly Subtracts figures correctly	Discussion Explanation Question and answer	Chart Chalk board illustration	Interpersonal relationship	Learners -Write and exercise by adding whole numbers corr	Pg 56	
			Multiplication of large numbers	Multiplication by 2 and 3 digit numbers 1) 1432 b) 5640 X 132 x 15 2864 28200 4296 +5640 + 1432 84600 189024	Pronounces new words fluently Writes digits in right place values	Arranges figures vertically Multiplies figures correctly	Discussion Explanation Question and answer	Chart Chalk board illustration	Effective communication Creative thinking	Multiplying numbers correctly Writing digitsin right places	Mk bk 7p g 57	
		6	Addition and multiplication	Addition and multiplication on numbers and division Combined operation 1) 5 + 4 x 3 = 5 + (4 x 3) = 5 + 12 = 17	Writes numbers Reads numbers	A learner -adds numbers as per BODMAS rule	Discussion Explanation Question and answer	Chart Chalk board illustration	Creative thinking Interpersonal relationship	Adds,Multiplies and divides numbers		
		1		Division of whole number by long division 120 6360 M 1 2 3 4 5 6 7 8 9 120 , 240,360,450,600,720,840,960,1080 53 120 | 6360 -600 = 53 360	A learner -Identifies the 9 multiples of the divided -Divides large numbers by long division.	Learner -Read words like multiples, long Division and uses them in sentences correctly	Discussion Explanation Question and answer	Chart Chalk board illustration	Effective communication Critical thinking	Dividing the numbers correctly	MK MTC BK 6 page 60	
		2		Types of numbers 1.Odd nos 1,3,5,7,9 - - - - 2.Even nos 0,2,4,6,8,10	A leaner -Identifies the different	Learner; -Reads the new words	Discussion	Chart	Effective communication	Identifying the different types of	-do-Page	

				3.Squarenos 1,4,9,16,25,36 4. Cube no,1,8,27,64,125 5.Prime nos 2,3,5,7,11,13 6.composite. 4,6,8,9,10,12,14,15 7.Tangular nos $\frac{n(n+1)}{2}$ eg 1,3,6,10,15,21 - - - - 2	types of numbers. -Members examples of each type of number.	-Spells the new words	Explanation Question and answer	Chalk board illustration	Creative thinking	numbers Finding the next number in the sequence	57 - 59	
		3		Consecutive numbers a)Counting numbers  X , x+1, , x+2 , x +3 b) Odd and even numbers 0 2 4 6 | 1 3 5 7 +2 +4 +6 +2 +4 +6						Identifying the types of numbers Forming equations	-do- Page 76	
		4	Divisibility test for 2,3,4,5							Checking for divisibility tests Dividing the numbers	MK MTC BK 6 Pages	
		5	Factors and G.C.F							Pronouncing words fluently Identifying the factors Finding the GCF	MK MTC BK 6 Pages	
			Prime factorize of numbers	Prime factorization 2 | 12 12 = 2 x 2 x 3 2 | 6 (Multiplication form) 3 | 3 12 = 2_1 x 2_1 x 3_1 (Subscript form) 12 = 2^2 x 3^1(power form) 12= {2_1 , 2_2, 3_1} set form	Divides numbers by prime factors Writes prime factors in the different forms	Reads in words confidently Pronounces prime factors	Guided discovery Discussion	Work cards Chalkboard illustrations	Creative thinking Critical thinking	Prime factorizing numbers Writing prime factors in the different forms	MK MTC BK 6 Pages	
			Use of venn diagram to show prime factors	Use of venn diagrams to show prime factors. F 8 PF 12 { 2_1 , 2_2, 3_1 }	Prime factorises numbers Represents	Reads the question correctly Writes prime factors in avenn	Demonstration Discussion Guided	Work cards Chalkboard	Problem solving Effective commun	Reading questions fluently Representin	Mk bk 6 pag	

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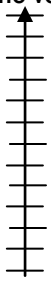
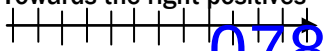
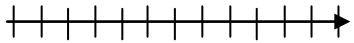
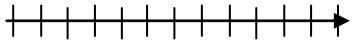
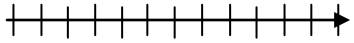
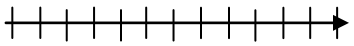
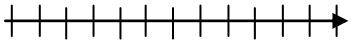
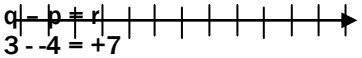
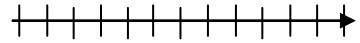
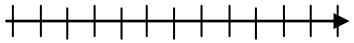
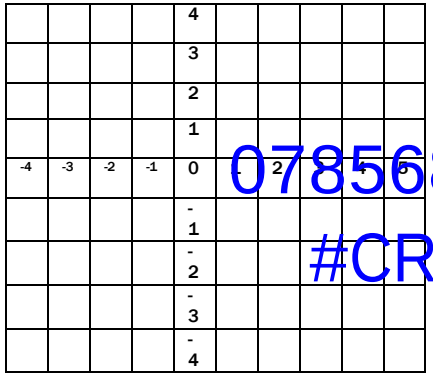
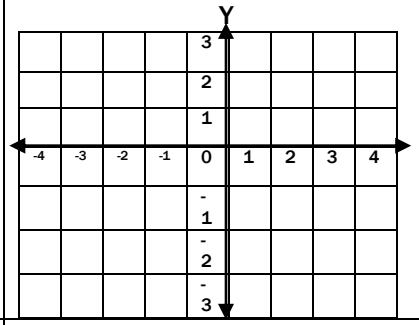
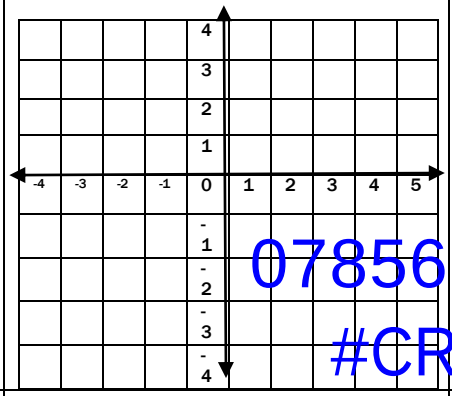
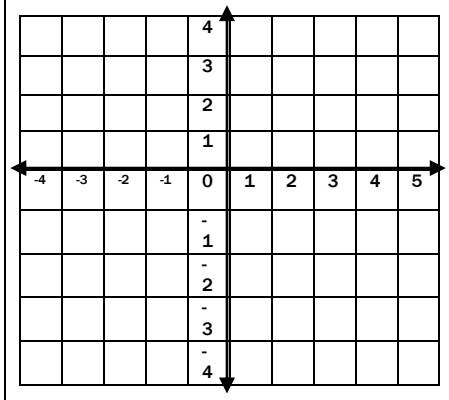
											Mk bk 6 pages	
											Mk bk pg 56	
		4	Application of LCM and GCF	Application oof GCF and LCM 1st number x 2nd number = LCM x GCF of two numbers are 24 and 4. Find the second number given that the first number is 12.	Compares the product of lcm and gcf with give numbers	Pronounces new words	Explanation Guided discovery	counters	Problem solving Effective communication fluency	Multiplying and dividing figures correctly		
		PaTTERNs an	Square roots of whole numbers	Square roots of whole numbers $\sqrt{36}$ 2 | 36 2 | 18 3 | 9 3 | 3 1 $\sqrt{(2x2) \times (3x3)}$ 2 x 3 6	Prime factorizes the given numbers Multiplies the prime factors correctly	Writes the prime factors correctly	Discussion Demonstration Guided discovery	counters	Problem solving Creative thinking fluency	Prime factorizing numbers Multiplying prime factors		

		d s e q u e n c e s	Square roots decimals	Square roots of decimals $\sqrt{0.09}$ 3 | 9 2 | 100 $\sqrt{9}$ 3 3 2 50 100 1 5 25 5 $\frac{(3x3)}{2x2x2(5x5)} = \frac{3}{2x3} = \frac{3}{10} = 0.3$ 25 5 25 2 36 36 5 5 2 18 1 3 9 3 3 1 $\frac{\sqrt{5x5}}{(2x2)x(3x3)} = \frac{5}{2x3} = \frac{5}{6}$	Identifies the place values given in a decimal Finds the square roots of all parts correctly	Reads the questions confidently	Guided discovery Discussion explanation	counters	Critical thinking Problem solving fluency	Identifying the place values given Finding the square roots	Mk bk pg	
			Application of square numbers	Application of square number 1. What is the square of a) 5 b) 2/3 c) 2 ½ d) 0.3 2. The area of a square is given below. Find the side length. a)100cm² b)$\frac{9m^2}{25}$ c) 1.44m²	Applies the concept of square roots correctly Finds the square root of the given numbers	Reads the questions confidently Writes the units on answers if applied	Guided discovery Discussion Demonstration Explanation	Counters Illustrate chart	Logical thinking Creative thinking Confidence	Reading questions confidently Finding the square roots correctly	Mk bk 57 pg	
			Cube roots	1.Find the cube root of 8 2.Work out the cube root of 0.064	-Factorises the given correctly	Forms simple structures from the given words.	Explanation Guided discovery	counters	Critical thinking togetherness	Reading questions		

		Integers	The number ordering and comparing integers	The horizontal and vertical number lines showing integers on the horizontal and vertical number lines. The vertical  Towards the north positives Towards the south negatives **The Horizontal** Towards the right positives  Towards the left negatives Writes 1 , -1 , 0 , 5 , -4 , -3 and -2 in ascending order -4 , -3 , -2 , -1 , 0 , 1 , 5 Use < , > or = to complete below correctly - 6 > 10	Reads and tells meaning of used vocabulary e.g. horizontal vertical interger	Draws and labels integers on the horizontal and vertical numberline Writes integers in ascending and descending order Compares intergers using the comparison symbols < , > or =	Guided discovery Guided discussion	Charts showing vertical and horizontal number line	Logical flow of ideas	Drawing Ordering Comparing	Mk bk 6 pg	
		6	Addition of integers using number line and writing addition mathematical statements on a number line	Arrows and direction on a numberline Write the integers shown on the numberline below  a = +5 ,b = +5, c = +3 , d = +3, e= -5 Add +2 + -5 using a numberline  +2 +-5 = -3 Writes the mathematical statements shown on the numberline.  Writes the integers shown by a , b write the mathematical statement.	Read the arrows correctly Reads given integers correctly	Shows arrows on numberline Writes integers shown by arrows Adds using a number line Writes mathematical statements shown on a number line	Guided discussion Guided discovery	A chart showing arrows on a number line and addition	Analytical thinking Effective communication	Drawing Writing integers		

		1	Subtraction of integers using a number line and writing subtraction of mathematical statements shown on number lines	Subtract -3 - +4 using a number line  -3 - +4 = -7 Write the mathematical statement shown on the number line below.   q – p = r 3 - -4 = +7	Reads the given integers correctly Reads arrows on the number line	Subtracts using the number line correctly Writes subtraction statements shown on the number line correctly	Problem solving Guided discussion	Charts showing	Logical flow of ideas	Drawing and representing arrows		
		2	Multiplication of integers using a number line	Multiplying 2 x 3 using a number line 2 groups of 3  	Reads given statements correctly	Multiplier integers using a number line correctly	Guided discovery Guided discussion	Charts showing multiplication of integers using a number line	Critical thinking	Drawing Multiplying		
		3	Addition and subtraction of integers without a number line	Multiplier rules of signs - x + = - - x - = + + x - = - + x + = + Work out: -6—9 -6-(-9) -6 + 9 9 – 6 = 3 Work out: -5 + -2 -5 + (-2) -5 – 2 -7	Reads multipliers rules of signs Reads given integers correctly	Adds and subtracts given integers correctly	Problem solving Group work	A chart showing addition and subtraction of integers	Creative thinking Logical reasoning Logical flow of ideas	Adding and subtracting integers		
		4	Multiplication and division of integers	Work out: -6 x -3 = +18 Divide -16 ÷ +8 = -2	Reads given statements correctly	Multipliers and divides integers without a number line correctly	Guided discovery Guided discussion	Chart showing multiplication and division of integers	Critical thinking Logical flow of ideas	Multiplying Dividing		

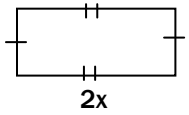
		5	Application of integers	The temporary was 20oF and dropped by 23oF. Find the new temperature 20oF – 23oF -3oF	Reads given information correctly	Computes relevant information and answers correctly	Problem solving Guided discussion	Board illustration	Creative thinking Logical reasoning	Reading Working out	
					do	do	Explanation demonstration	Illustrated chart	Critical thinking	Identifying the axes correctly	Mk bk pg 59
		1	Potting Co – ordinates in a graph	Plotting co – ordinates in the graph. Eg A (1,1) B (2, -1) C (-2, -1) D(1,3) Y  	_Draws a graph -Plot co – ordinates -Identifies the co – ordinates correctly			Illustrate chart Chalkboard illustration			mk bk pg 136

		2	Plotting and forming figures on a graph	Plot the following A (3,4) B(0,1) C(5,1) and join the points. Name the figure formed.  	-Joins the points -Names the figures -Finds the areas of the figure forming	-Describes the formed figures. -Masters the area of the formed figures	Explanation demonstration discussion	Illustrate chart Chalk board illustration	Problem solving Critical thinking fluency	Joining points Naming shapes formed Finding area of figures		
		3		 	-Draws squares -Names x any y co – ordinates -Plots co – ordinates on a graph	-Reads , spells , writes and describes and describes co – ordinates graphs	Questions and answer Demonstration discovery	Chalk board illstration		Plotting co – ordinates on a graph	Mk bk pg 176	
		4		When naming co – ordinates , begin with x – axis then y –axis  	Identifies the co-ordinates given Plots co-ordinates given correctly	Reads the co-ordinates fluently Writes the co-ordinates correctly	Demonstration Explanation Guided discovery	Chalkboard Illustration		Naming co-ordinates	Mk bk 7pg 178	

		Finite system	Addition of numbers in finite system	Counting numbers in finite system; Finite 4: {0 , 1 , 2 , 3} four digits used Finite 5: {0,1,2,3,4} five digits used **Addition in finite system.** Consider the finite given Sum should be less than one given finite Incase of equality or above the finite, form groups of the finite and write the reminder as the answer 3 + 4 = ___(finite 7) use a dial	Describes the digits under the given finite	Counts the digits in the given finite Adds the figures in the given finite	Think pair share Group discussion	Charts	Critical thinking Effective communication	Describing digits in given finite Adding the figures given	Mk bk 7 pg 178	
		6	Subtraction on numbers in finite system	**Subtraction of numbers in finite system** Subtract 3 – 4 = _____(finite 7) (3+7) – 4 = 10 – 4 = 6 :. 3 – 4 = 6 (finite 7) Variety of examples to be used Use of a dial	Reads the words and figures confidently	Identifies the finites used Subtracts the figure used correctly in consideration of the finite	Think pair share Group discussion	Charts	Critical thinking Effective communication	Reading the new words given Identifying the finite Subtracting the figures given		
		1	Mixed operation in finite system	Addition and subtraction in finite Workout: 2^3 – 3 + 2 = ____(finite 7) Simplify: 2 + 1 – 3 = ___(finite 5) Workout: 5 – 7 + 2 = ___(finite 5) Application of BODMAS rule is used Use of a dial	Describes the integers given correctly	Uses the rule of BODMAS correctly to solve	Demonstration Group discussion	Charts Work cards	Confidence Problem solving	Writing new words Counting numbers or values Using the rule of BODMAS correctly Multiplying the given values under the stated finite	Mk bk 6 pg 50	
		2	Multiplication of numbers in finite system	**Multiplication in finite system** Multiply: 2 x 3 = _____(finite 5) 2 x 3 = 6 6 ÷ 5 = 1r1 2 x 3 = 1 (finite 5) Use of a dial	Describes the given finite	Multiples the figure in respect to the finite given	Guided discovery Group discussion	Chalk boar illustration	Problem solving creative thinking		Mk bk 6 pg 50	
		3	Division	**Division in finite system** Work out:7 ÷ 8 = ____(finite 4) (7 + 4) = 11 11 ÷ 8 = 1 r 3 7 ÷ 8 = 3 (finite 4)	Reads the words confidently	Divides numbers correctly	Explanation	Chalkboard illustratioin	Creative thinking Problem solving confedence	Dividing numbers under a stated finite	Pg 48	
		4	Unknown value in finite system	**Finding unknown value in finite system** Solve for x 3x = 4 (finite 7) 4 + 7 = 11 (finite 7) 11 + 7 = 18 (finite7) 3x/3 = 18/3 X = 6 (finite 7)	Describes the given finite Pronounces words correctly	Carries out basic operations Solves the statement according to the finite	Explanation Demonstration Group work	Charts Chalkboard illustration	Problem solving Critical thinking	Counting values of numbers Reading new words give fluently	Pg 49	

		5	Finite system Word problem	**Application of finite system** Application of clock arithmetic of mode 7. Applied in counting days of the week 0 = Sunday 4 = Thursday 1 = Monday 5 = Friday 2 = Tuesday 6 = Saturday 3 = Wednesday Application of finite 12. Applied when counting months of the year. Jan Feb Mar Apr May Jun Jul 1 2 3 4 5 6 7 Aug Sept Oct Nov Dec 8 9 10 11 12	Reads the words and structure fluently Describes the mode used	Carries the basic operation correctly Solves the word problem involving the finite given	Guided discovery Group discussion Think pair share	Charts Counter Chalkboard illustrations	Confidence Fluency Problem solving Critical Thinking	Reading new words Writing new words Counting values Solving problem involving finite	Mk bk 6 pg 56	
			TERM TWO 2017									
		ALGEBRA	Collecting like terms	Example; Simplify: r + r + n 3n Example Simplify: 3x + 6 + - x -2y 3x – x + 6y – 2y 2x + 4y	Learners Define like terms Collect like terms	Learners; Need write, spell new words like collect, like, term	Problem solving Guided discovery	Critical thinking Creative thinking Effective commun ication	Real objects like leaves, stones, bottle tops	Learner sort objects and collect like terms		
			Substitution	Example given that P = -6 Find P + 2 -6 + 2 -4	Learner; Substitute correctly Work out member correctly	Learners read; write, spell words like substitute, replace	Guided discussion Explanation Discussion	Effective communication Problem solving	Real objects like leaves, stones, bottle tops	Learner substitute		
			Removing brackets	Example simplify 3(b + 4) X 3 x 6 + 4 x 3 3b + 12	Learner; Remove brackets Simplify algebraic	Learners read, write, spell new words brackets, simplify	Guided discovery Explanation Discussion Brain storming	Problem solving Critical thinking	Chalkboard illustration	Learners remove bracket simplify		
			More about removing brackets	Example Simplify 3(x + 3) – 2(x – 1) 3x + 9 – 2x +2 3x – 2x + 9 + 2 X + 11	Learners; Remove bracket Simplify algebraics	Learners read, write, spell new words brackets, simplify	Brain storming Guided discussion Guided discovery	Creative thinking Critical thinking	Chalkboard illustration	Learner remove bracket and simplify		

			Indices	Simplify $m^3 \times m^2$ Mxmxmxmxm – m^5 Or M(2+2) = m^5 Example Sin/Simplify: P5 ÷ P3	Learners; State laws of indices Multiply power of the same base	Learners read, spell, pronounce indices, index exponent, base, product	Problem solving Brain storming Explanation Guided discussion	Critical thinking Analytical thinking	Chalkboard illustration A chart showing indices	Simplify indices		
			Solving simple equation	Example; Solve x + 3 = 9 X + 3 – 3 = 9 – 3 X = 6	Learner; Solve simple equations Collect like terms correctly	Learners read, spell, pronounces equations, like terms	Problem solving Guided discussion Explanation	Effective communication Creative thinking	Chalkboard illustration	Solving equation		
			Forming and solving equation	Example Moses has 8 more cows than Kato If both have 16 cows. How many cows does Moses have? Let Kato's no. of cows be y	Learners will Form equations Solve equations	Learners spell, pronounce, equation solve	Problem solving Guided discussion Explanation	Effective communication Creative thinking	Chalkboard illustration	Learners practice forming solving equation		
			Solving fraction equation	Example Solve 2p/4 + 5 = 17 2p/4 = +5 – 5 = 17- 5 2p/2 = 12.4/2 P = 6 x 4 P = 24	Learners; Identify equation Solve equation with fractions	Learners read, spell, pronounce, new words, fraction, equations.	Brain storming Problem solving Discussion	Critical thinking creative thinking	Learners practice solving equations	A chart showing solving fraction equation		
			More about forming and solving equations	Example Okello is 8 years older than John. If their total age is 20 years, how old is each person? Let John's age be k K+ k + 8 = 20 2k + 8 – 8 = 20 -8 2k/2 = 12/2 Okullo K + 8 6 + 8 144years John 6 years	Learners; Read and interpret questions Solve equations	Learners read, spell, pronounce new words equation	Guided discovery Explanation Brain storming	Critical thinking Effective communication	Learners practice Solving equations	A chart showing solving equations		
			Solving equation involving brackets	Solve: 3(y +4) = 12 3y + 12 = 21 3y + 12 – 12 = 21 – 12 3x/3 = 9/3 X = 3	Learners; Remove brackets Solve equations	Learners read, spell, pronounce words equation, brackets etc	Explanation Guided discovery Guided discussion	Critical thinking Effective communication	Chalkboard illustration	Learners practice solving equation		

			More about equation	Solve: 3(y + 4) = 12 3y + 12 = 21 3y + 12 – 12 = 21 – 12 3y/3 = 9/3 Y = 3	Learner; Collects like terms Solves for the unknown	Learners read, spell, unknown, equation	Explanation Guided discovery Guided discussion	Critical thinking Effective communication	Chalkboard illustration	Learners practice solving equation		
			Application of algebra	The length of a rectangle is twice its width and its perimeter is 24cm Let the width be x  2x Calculate the actual length and width 2(L+W) = P 2(zx + x) = 24 4x + 2x = 24 6x/6 = 24c/6 Length 2x = 2 x 4c = 8c Width X = 4	Learners; Identify equations Form equations Solve equations	Learners read, spell, equations, unknown						
		Algebra (inequality)	Solve and form (write) solution sets	Give the solution set for: x < 5 X = {1 , 2 , 3 , 4} X = {4,3,2,1}	Learners; Solve inequalities Write solution sets	Learners read, write, spell new words like inequalities, solve, equations	Guided discussion Problem solving Guided discovery	Creative thinking Analytical thinking Effective communication	Chalkboard illustration	Learners practice solving and writing solution set		