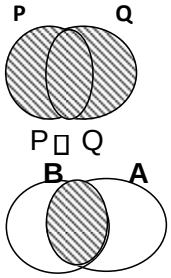
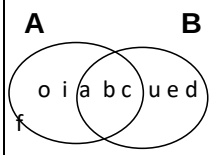
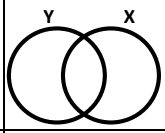
SCHEME OF WORK FOR P.4 MATHEMATICS
TERM ONE

WK	PD	TOPIC	SUB TOPIC	CONTENT	SUBJECT COMPETECIES	LANGUAGE COMPETENCIES	METHODS	LIFE SKILL	T/L AIDS	T/L ACTS	REF
1	1 2 3	**S E T C O N C E P T**	Revision of sets Listing elements of sets Finding the number of elements	- Revision of sets; Definition of: - (a) Set (b) Elements - Naming sets - Counting number members in a set listing elements of a set symbol of number of elements is "**n**" e.g n(A) means number of elements in set A	▪ Group objects of a set. ▪ Draws objects. ▪ Identifies sets. ▪ Listing of members in a set ▪ Writes symbol correctly	▪ Defines a set. ▪ Elements of sets. ▪ Uses the number of elements	Guided discussion Demonstration Illustration Explanation	▪ Critical thinking ▪ Effective communication. ▪ Creative thinking.	Real objects coins, tins, pens, books, charts etc.	-Grouping -Drawing -Counting - Oral discussion	A new MK primary MTC book 4 pg 1.
	4 5		Types of sets	**Types of sets** ▪ Empty/Null set ▪ Equivalent and non-equivalent sets. ▪ Equal and unequal sets. ▪ Equivalent and non equivalent	• States examples of different types of sets. • Identifies types of sets.	• Defines the types of sets. • Names the different types of sets. • Give oral examples of empty	Demonstration Explanation	▪ Creative thinking. ▪ Effective communication ▪ Critical thinking	▪ Real objects ▪ A chart	-Matching - Drawing - Naming sets - Listing members.	New MK primary MTC book 4 pg 1-5

						sets					
	6		Intersection of sets	▪ Symbol for intersection. ▪ Listing members in the intersection. ▪ Number of elements in the intersection set.	▪ Writes the symbol for intersection. ▪ Shades the intersection. ▪ Lists members.	▪ Defines intersection sets.	Illustration Demonstration Guided discussion.	Creative thinking Logical thinking	Real objects. A chart showing intersection part.	-Drawing and shading. - Listing members in the intersection.	MK primary MTC book 4 pg 9 - 11
2	1		Union and intersection of sets	▪ Symbol for union. ▪ Listing of members in the union set. ▪ Number of elements in the union set.	▪ Writes the symbols for union sets. ▪ Lists members in the union set.	▪ Defines a union set. ▪ Describes the shaded regions.	-Think pair share. - Guided discussion. - Demonstration	▪ Decision making. ▪ Effective communication ▪ creativity	▪ Real objects ▪ A chart	▪ Drawing and shading. ▪ Listing members in the union	MK Pri MTC bk. 4 pg. 13 - 15

	2 3 & 4	**SETS CONCEPT**	Shading venn diagrams	▪ Definition of Venn diagrams ▪ Venn diagrams for union, intersection, difference of sets and complements  P □ Q 	▪ Defines venn diagram ▪ Interprets the concept of the difference of sets. ▪ Shades the regions. ▪ Draws the shaded regions.	▪ Draws venn diagrams well ▪ Describes the shaded parts.	▪ Guided discussion ▪ Demonstration ▪ Discovery ▪ Illustration	▪ Effective communication. ▪ Critical thinking. ▪ Creativity	▪ Real objects. ▪ Welldesigned chart	▪ Drawing ▪ Shading	New MK primary MTC book 4 page 13-15

				A □ B							

	5 6 & 7		Application of Venn Representing the information on the venn diagram	Example  List the members of i) Set A ii) Set B iii) A ∩ B iv) A ∪ B v) B – A Given; X= { 1,2,3,4,5}, Y= {0,2,4,6} a) Represent the above sets on venn diagram.  	▪ Lists members of a given region of venn diagram ▪ Finds the number of elements	▪ Draws venn diagrams ▪ Identifies the different regions of the venn diagram ▪ Counts the number of members ▪ Represents given sets on venn diagrams	▪ Guided discussion. ▪ Demonstration. ▪ Discovery.	▪ Creativity. ▪ Effective communication. ▪ Critical thinking.	▪ Real objects ▪ A well designed chart	▪ Listing ▪ Drawing ▪ Countin g	New MK Primary MTC bk 4 pg. 21
3	1	W H	Place values	Reading and counting numbers Place values.	▪ Identifies the place values. ▪ Writes the	▪ Read the place values in	▪ Guided discussion. ▪ Group	▪ Creative thinking.	▪ Abacus ▪ Place value	▪ Identifying place	New MK

		O L E N U M B E R S		(a) In words. (b) In figures. Example Ones Tens Hundreds Thousands 4 5 6 3	place values.	words and in figures. Counts in tens from 10-200 Names place values from ones to millions Reading values in words.	illustration.	▪ Effective communication. ▪ Decision making.	chart.	values. Writing place values.	Primary MTC book 4 pg 19 – 20.
	2		Values of digits in numbers.	Values of digits in numbers. Example 1 What is the value of each in the number Tth Th H T O 7 4 6 3 2 (2x1)=2 (3x10)=30 (6x100)=600 (4x1000)=4000 (7x10,000)=70,000	Identifies the place values of digits. Writes the place values on each digit. Multiplies digits by their place values. Writes the values.		▪ Guided discovery ▪ Demonstration. ▪ Illustration.	▪ Creative thinking. ▪ Effective communication. ▪ Discussion making.	▪ Place value chart. ▪ Abacus.	▪ Identifying place values. ▪ Multiplying of digits by P.V. ▪ Writing value	New MK Primary MTC Bk 4 pag 21.

3		Application of place values and values	▪ Finding the sum and difference of; - place value to place value - value to value - place value to value	▪ Finds the sum of place to place value, value to value, and place value to value ▪ Works out the difference between place value and place value, value and value,	□ Reads place value and value correctly □ Writes place values				s.	
				place value and value						
4 5		Writing in words writing in figures	▪ Writing words in figures. ▪ Writing figures in words.	▪ Writes figures in words. ▪ Writes words in figures.	▪ Reads figures correctly. ▪ Reads words correctly.	▪ Explanation ▪ Guided discovery ▪ Discussion.	▪ Effective communication. ▪ Creative thinking. ▪ Logical reasoning.	▪ Place value chart. ▪ abacus	-Writing -Reading - Arranging digits.	New MK primary MTC bk 4 pgs. 22-23
6		Expanding of numbers	Expanding of numbers ▪ Using place values ▪ Using values.	▪ Identifies place value. ▪ Writes the values. ▪ Writes in expanded form.	▪ Reads the place values. ▪ Reads the values.	▪ Illustration. ▪ Discovery ▪ Group work	▪ Effective communication. ▪ Logical thinking ▪ Decision making	▪ A place value chart. ▪ abacus	Identifying values. - Writing values. - Expanding numbers.	New MK primary MTC bk 4 pg 21.

	7		Finding Expanded numbers	What number has been expanded (7 x 1000) +(4 x 100 + (3x10) + (8 x 1)	▪ Multiplies the numbers correctly. ▪ Adds the numbers. ▪ Identifies the expanded number.	▪ Reads the figures. ▪ Reads the expanded number.	▪ Guided discovery. ▪ Group work. ▪ Illustration .	▪ Effective communication. ▪ Logical reasoning.	▪ Place value chart. ▪ abacus	- Multiplying -Adding - Identifying	New MK primary MTC book 4 pg 24
4	1		Forming numbers using digits (digit 0 concept)	Form up to 5 digit numbers	▪ uses digits to form numbers ▪ solves application involving formation of numbers using digits	▪ identifies smallest and largest numbers formed					

	2		Rounding off of whole numbers	▪ Rounding off whole numbers upto thousands	▪ Mentions the meaning of approximate. ▪ Rounds off numbers to the nearest tens, hundreds, thousands.	▪ Mentions the meaning of approximate . ▪ Reads the number given.	▪ Discovery ▪ Discussion ▪ Illustration	▪ Logical thinking. ▪ Critical thinking. ▪ Effective communication.	▪ Place value chart. ▪ abacus	- Rounding off to the nearest tens / hundreds.	New MK primary MTC bk 5 pages 54 - 55

	3 4 5 6 7 1		Decimals	▪ changing fractions of denominator 10, 100, and 1000 to ▪ decimals changing decimals to common ▪ fractions place value of ▪ decimals values of decimals ▪ writing decimals in words vice versa	▪ changes common fractions to decimals ▪ changes decimals to common fractions ▪ writes place values of decimals correctly	▪ reads decimals ▪ spells the place values	▪ guide discussion ▪ think pair share ▪ discovery	▪ Logical thinking. ▪ Critical thinking. ▪ Effective communication.	▪		
5	2 3										
	4		Roman numerals	▪ Basic roman numerals. ▪ Roman numerals got by repeating	▪ Identifies roman numerals. ▪ Adds the	▪ Recites the roman numerals. ▪ Mentions	▪ Explanation ▪ Discussion ▪ Discovery.	▪ Creative thinking. ▪ Problem solving.	▪ Chart showing roman numerals.	-Reciting the roman numerals.	New MK Primary MTC bk

				▪ I, X, C Roman numerals got by adding subtracting.	Roman numerals. ▪ Subtracts the Roman numerals.	the roman numerals obtained.		▪ Logical thinking.			4 pg 33

	5 6 7		Roman numerals Application of roman numeral	▪ Changing from Hindu Arabic numerals to Roman numerals. ▪ Changing from Roman numerals to Hindu Arabic ▪ numerals. Word problems about Roman and Hindu Arabic numerals.	▪ Writes the Hindu Arabic numerals in Roman numerals. ▪ Writes the Hindu Arabic numerals correctly. ▪ Writes the Roman numerals in Hindu Arabic.	▪ Recites the roman numerals. ▪ Reads the statements given correctly.	▪ Explanation ▪ Discussion ▪ Discovery.	▪ Creative thinking. ▪ Problem solving. ▪ Logical thinking.	▪ Chart showing roman numerals.	-Writing the roman numerals. -Reading the statement given.	New MK Primary MTC bk 4 pg. 34-35.

6	1			▪ Addition and subtraction of roman numerals.	▪ Adds Roman numerals. ▪ Subtracts roman numerals.	▪ Reads the given word problem. ▪ Recites the Roman numerals.	▪ Guided discussion ▪ Illustration ▪ Discovery.	▪ Problem solving. ▪ Creative thinking. ▪ Logical thinking.		-Adding roman numerals. Subtracting roman numerals.	New MK Primary MTC bk 4 page 35 Oxford primary bk 4 page 67.
	2 3 4	OPERATION ON NUMBERS	Adding up to one million Application of addition of whole numbers	Addition of; ▪ 2 digit to 1 digit numbers ▪ 2 digit to 2 digit ▪ 3 to 2 digit ▪ 3 to 3 digit ▪ 4 to 3 digit ▪ 4 to 4 digit ▪ 5 to 4 digit and ▪ 5 to 5 digit with and without regrouping Solving word problems involving addition (sum, altogether, total, increase, more, plus, aggregation)	▪ Adds numbers without regrouping correctly. ▪ Adds numbers with word problems correctly. ▪ Solves word problems involving addition	▪ Reads numbers in words. ▪ Interprets the word problem given. ▪ Uses the mathematical terms for addition correctly	▪ Explanation. ▪ Guided discussion. ▪ Guided discovery.	▪ Problem solving. ▪ Logical thinking. ▪ Creative thinking. ▪ Effective communication	▪ Flash cards showing numbers for addition.	Adding numbers. Reading the word problem.	New MK MTC Bk. 4 pages 38 - 41

6	5 & 6		Subtracting up to one million	▪ Subtraction without and with re-grouping. (1 fom2, 2 from 2, 2 from 3, 3 from 3, 3 from 4, 4 from 4)	▪ Subtracts numbers without regrouping. ▪ Subtracts numbers with regrouping.	▪ Reads the numbers in words correctly. ▪ Uses the new words to make correct sentences	▪ Explanation. ▪ Guided discovery. ▪ Guided discussion.		▪ Flash cards showing numbers for subtraction ▪ Using abacus	Subtracting numbers with or without regrouping.	New MK primary MTC bk pages 42 – 43.

7	7	O P E	Application of Subtracting up to ten thousand	▪ Solves word problems involving subtraction	▪ Subtracts numbers with regrouping. ▪ Arranges numbers according to their correct place values.	▪ Reads the numbers given in words. ▪ Arranges numbers according to their correct.	▪ Explanation. Guided discovery. ▪ Guided discussion	▪ Problem solving. ▪ Logical thinking. ▪ Creative thinking.	▪ Flash cards showing numbers for subtraction	Subtracting with regrouping.	New MK primary MTC bk 4 pg 43 – 44
	1	R A T I O N N U M B E	Application of BODMAS	Solving number involving BODMAS	▪ Carries out operation following the order of BODMAS	▪ Reads and writes BODMAS in full					
	2 3 4 5 6		Multiplication of whole numbers up to 4 by 2 digit	Multiplication by 10,100,1000,10000 • Multiplication of 1 by 1, 2 by 1, 2 by 2, 3 by 1, 3 by 2, 4 by 1, 4 by 2 digit numbers involving regrouping • Application of multiplication	▪ Multiplies given problem. ▪ Identifies the multiples of ten.	▪ Reads the word problem. ▪ Recites the multiples of ten. Uses ▪ correct mathematical terms for multiplication e.g 2 multiplied	▪ Explanation ▪ Discussion ▪ Discovery. ▪ Rote method	▪ Creative thinking. ▪ Logical thinking. ▪ Problem solving.	▪ Counters. ▪ Multiplication table.	Multiplying numbers	New MK primary MTC bk 4 pages 46 - 51

		R				by 3					

8	7 1 2 3 4	S	Division of whole numbers up to 4 digits	▪ Division as repeated subtraction. ▪ Without remainders. ▪ Division by 10s ▪ Division by 2, 3, 4, 5, 6, 7, 8, 9 ▪ Division as repeated subtraction ▪ Division using long division ▪ Application of division	▪ Divides numbers using repeated subtraction. ▪ Divides numbers using long division methods	▪ Counts the number of times a number has been subtracted.			▪ Counters	Counting numbers that have been divided.	New MK primary maths Bk 4 pages 52 - 55
					▪ Divides numbers using long division methods.	▪ Recites the multiplication table. ▪ Reads the word problems.	▪ Discussion. ▪ Guided discovery. ▪ Demonstration.			-Dividing numbers using long division. -Multiplying. Subtracting	New MK Primary MTC Bk 4 pages 53 – 55.
					▪ Divides numbers using repeated subtraction ▪ Divides numbers using long division methods	▪ Counts the number of times a number has been subtracted ▪ Uses division terms like correctly	▪	▪	▪ Counters ▪ Flash cards ▪ Real objects	Counting numbers that have been divided	New MK primtc bk 4 pg 52-55

8	5	N U M B E R	Types of numbers	Types of numbers ▪ Counting numbers. ▪ Whole numbers. ▪ Even numbers ▪ Odd numbers.	▪ Identifies the types of numbers. ▪ Finds the missing numbers.	▪ Recites the numbers. ▪ Counts numbers correctly.	▪ Explanation ▪ Discussion ▪ -Guided discovery	▪ Problem solving. ▪ Critical thinking. ▪ Discussion making. ▪ Problem solving.	Chart showing examples of the types of numbers. ▪ Chart showing number	Giving types of numbers.	New MK primary MTC bk 4 pg. 61. New MK Pr. MTC bk
	6 &		Number sequences	Number sequences ▪ Square numbers ▪ Prime numbers	▪ Identifies the next numbers by adding.	▪ Counts numbers. ▪ Mentions				Finding the next number in	
	7	F A C T S		▪ Composite numbers ▪ Triangular numbers	▪ Identifies the next number by subtracting.	the next number in the sequence.		▪ Logical thinking. ▪ Creative thinking	sequences.	the sequences.	4 pages 61 – 62
	1			Forming and completing sequence of numbers	▪ Completes sequence of numbers	▪				Finding the multiples.	

9	2 3 & 4 5 6	AND SEQUENCES	Multiples Factors	Multiples Of Numbers ▪ Listing Multiples Of Given Numbers. ▪ Common Multiples. ▪ Lowest Common Multiples (LCM). ▪ Factors of Numbers up to 50 ▪ Common Factors ▪ Lowest Common Factors (LCF) ▪ Highest Common Factors (HCF)	▪ Finds the multiples of various numbers. ▪ Lists the common multiples. Multiples various numbers like 10, 100, 1000	▪ Defines multiples. ▪ Mentions the multiples of various numbers. ▪ Counts in tens, hundreds and thousands.					

10	7 & 1		Application of factors on venn diagrams	Listing factors ▪ Identifying ▪ common factors Drawing venn ▪ diagrams Filling in the ▪ factors							New MK Pr. MTC bk 4 pg 64 - 71