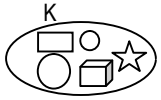
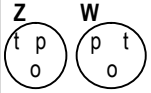
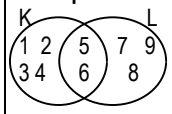
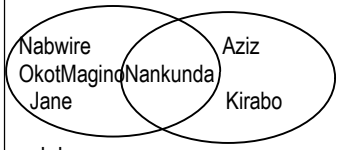
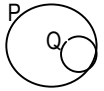
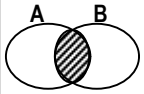
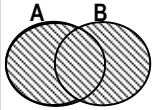
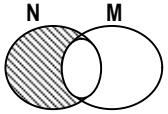
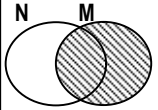
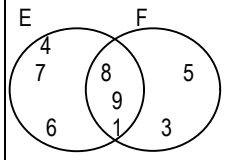
P.4 MATHEMATICS SCHEME TERM 1

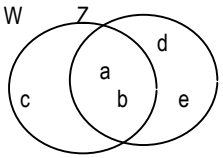
WK	PD	TOPIC	SUB-TOPIC	SUBJECT COMP.	COMPETENCES		CONTENT	METHOD	ACTIVITIES	L/SKILL	T/LAIDS	REF	REM
					SUBJECT	LANGUAGE							
1	1	set	set concept		**The learner;** Describes a set. Draws sets Names the given sets Counts members of a given set	**The learner;** Reads, pronounces and spells new words -sets -member -element	**A set** This is a collection of well defined objects / elements / members -A member is a thing which belong to a set. -An element is another name for a member **Examples** Name these sets a) (a , e, i, o, u) A set of vowel letters b) How many elements has set K? K  Set K has 5 elements.	Guided discovery Observation	Drawing sets Naming sets counting members of a set	Effective communication Problem solving	Pens Books Rubbers Leaves	A new MK book 4 page 1 St Bernard book 4 page 1 - 3	
	2	sets	set concept		**The learner;** Describes various types of sets Draws the set symbols	**The learner;** Reads, pronounces, spells and uses words -empty sets -equal sets -equivalent sets -union sets	**Empty sets (Null set)** -An empty set is a type of set with no members / elements -The symbol in $\emptyset$ or $\{\ \}$ **Examples** 1. Pupils in our class with blue pens Not empty set 2. A boy with 7 legs Empty set P 3.  Set P is an empty set	Inquiry Guided discovery	Describing types of sets Drawing sets and symbols	Logical thinking Critical thinking Problem solving	Real objects like -cups -plates -bottles	Fountain Primary Maths book4 page 5 A new MK primary Maths book 4 page 2 St. BeneralMaths book 4 page 4 – 5	
	3	sets	set concept	Types of sets	**The learner;** Describes the various types of sets Draws sets and	**The learner;** Reads, pronounces, spells and uses words -equal sets -non equal sets	**Equal sets** -Equal sets are sets with the same number of members which are exactly the same. -Non-equal sets are sets with the same number of elements which are not exactly	Guided discovery Discussion	Drawing sets Matching equal sets	Critical thinking Effective communication	Real objects like -bottles -pens -plats	MK primary maths book 4 page 8	

					their symbols		the same **Example 1** **Z** **W**  <u>Set Z and Set W are equal sets</u> **Example 2** Given that R = (w,x,y,z), S=(a,b,c,d) <u>Set R and S are non-equal sets</u>				-pencils -chalk		
	4				**The learner;** Describes the various types of sets Draws sets and their symbols	**The learner;** Reads, pronounces, spells and uses words -equivalent -non equivalent	**Equivalents sets** -Equivalent sets are sets with the same number of members which not be exactly the same Symbol: ⟷ -Non-equivalent sets are sets with different numbers of elements (⟷) **Example 1** A = (△ ,,◯ ▭ ⇨ B = () Set A and B are equivalent sets (Set A ⟷ Set B)	Guided discovery Inquiry	Describing Drawing	Problem solving Effective communication		A new MK primary Maths book 4 page 5 – 7 Fountain prmarymaths book 4 page 6 – 7	
	5				**The learner;** Describes the various types of sets Draws the sets and their symbols Lists and finds the number of elements	**The learner;** Reads, pronounces, spells and uses new words -intersection sets	**Intersection sets** These are sets with common members Symbol: ∩ **Example 1** K L  i) List K ⋂ L K ⋂ L = (5, 6) ii) ⋂ (K⋂ L) = 2 **Example 2** D = (x, y, z, w) and K =(4, 5, 6, 7) i) What is D ⋂ K? D ⋂ K = { }	Guided discovery Discussion Inquiry	Describing Drawing	Problem solving Effective communication		A new MK primary maths book 4 page 9 – 12 St. Bernard maths book 4 page 8 – 11	

							ii) Find $\cap$ (D $\cap$ K) = 0						
2	1	Sets	Set concepts	Types of sets	**The learner;** Describes the union set Draws sets and their symbols Counts members of the union set	**The learner;** Reads, pronounces, spells, writes and uses key words -union set	**Union sets** This is a set of all elements that contains two or more given sets. Symbol " $\cup$ " **Example 1** Given that T = (Nabwire, NaginomOkotm Jane) V=(Aziz, Nankunda, NirabomMagino) **What is T $\cup$ V?**  T $\cup$ **V = (Nabwire, Okot, Jane, Magino, Aziz, Nankunda, Kirabo)** **Find n(T $\cup$ V) = 7** Note: Common members in union sets are always written or counted once. **Example 2** E=(2,3,5,8) and G=(1,4,6,7,9) **Find E $\cup$ G** E $\cup$ G =(1,2,3,4,5,6,7,8,9) **n(E $\cup$ G) = 9 members** **n(E$\cap$G) E$\cap$G = $\{\ \}$ n(E$\cap$G) =0** a)	Inquiry Guided discovery Discussion	Listing elements of the union Drawing venn diagrams	Problem solving Effective communication	Real objects like -cups -pencils -plates -pens	A new primary maths book 4 page 13 Fountain primary mathematics book 4 page 8 – 10	
	2	Sets	Set concepts		**The learner;** Describes a subset Identifies subsets Draw subsets	**The learner;** Reads, pronounces, spells and uses words correctly -subset	**Sebsets**: This is a set of elements got from a given set Symbol $\subset$ **Example 1** Describe the sets below P  Set Q is a sub set of set P. (Q $\subset$ P) **Example 2** Given that A=(a,e,i,o,u) B=(i,o,u) Describe set A and B Set B is a subset of set A	Guided discovery Discussion	Identifying subsets Drawing subsets	Problem solving			

							Draw a venn diagram to show that all girls are pupils.						
	3	Sets	Set concepts	Shading of regions	**The learner;** Identifies the regions Draws the venn diagrams Shades the region	**The learner;** Reads, pronounces, spells and uses words -union intersection	**Shading of regions** **Example 1** shade set A on the venn diagram below  **Example 2** **Shade the union of set K and P on the venn diagram below**  **Example 3** **Shade N – M (N only)**  **Shade set M** 	Inquiry Guided discovery Discussion	Drawing the venn diagrams Shading the regions	Logical thinking Effective communication	Circular objects like -coins -bottle tops		
	4	Sets	Set concepts	Difference of sets	**The learner;** Identifies the members of a particular set Lists the members	**The learner;** Reads, pronounces, spells and uses words correctly	**Difference of sets** Study the venn diagram below and answer the questions Example 1  What is i) E – F E – F (6,7) iI) F– E F – E (3, 4,5) iii)n(E – F n(E – F)=2	Brain storming Guided discovery					

							iv) n(F – E) = 3						
	5			Finding the members of elements in a given set	**The learner;** Identifies the given sets correctly Finds the number	**The learner;** Reads, pronounces, spells and uses words correctly	**Find the number of elements in a given set** Exampls If set B = (Vowel letters), how many elements are in set B? B(a,e,i,o, u) n(B) = 5 Example 2 K= (all counting num bers up to 10) Find n(K) K= (1,2,3,4,5,6,7,8,9,10) Therefore n(K) = 10	Discussion Brain storming					

3	1	Sets	Set concepts	Listing elements from a venn diagram	**The learner;** Identifies the elements correctly Lists the elements draws venn diagrams	**The learner;** Reads, pronounces, spells and uses words correctly -elements -venn diagram	Example Study the venn diagram below and answer the questions W Z  a) List the elements of set W W = (a,b,c) b) List the members of Z Z (a,b,d,e) c) b)							
	2			Drawing and representing elements on venn diagram	**The learner;** Identifies the given sets correctly Represents the elements Draws venn diagram	**The learner;** Reads, pronounces, spells and uses words correctly -elements -venn diagrams								
	3	Numeracy	Whole numbers	Finding place values of whole numbers	**The learner;** Identifies the place values of each digit Names the place value Writes the place value of each digit	**The learner;** Reads, pronounces, spells and uses words correctly -place value -digit -number								
	4	Numeracy	Whole numbers	Finding values of whole numbers	**The learner;** Identifies the place values Names the place values Writes the values	**The learner;** Reads, pronounces, spells, writes and uses words -place value -value -digit -number								

	5			More about values of numbers	**The learner;** Identifies the place values of each digit Names the place values Finds the sum, difference, product of the values	**The learner;** Reads, pronounces, spells							
4	1	Numeracy	Whole numbers	Writing numbers in expanded form	**The learner;** Identifies place values of digits Writes the given number in expanded form	**The learner;** Reads, pronounces, spells and uses words -expand -Lange vale place value							
	2			Finding expanded numbers	**The learner;** Identifies the given number Writes as a single number	**The learner;** Reads, pronounces, spells and uses words -expand -value -place value -single -Lange							
	3	Numeracy	Whole numbers	Writing figures in words	**The learner;** Identifies the figure correctly	**The learner;** Reads, pronounces, spells and uses words -figures -numbers							
	4			Writing numbers in figures	**The learner;** Identifies the written statement Interprets the statement Writes numbers in figures	**The learner;** Reads, pronounces, spells and uses words -figures -numbers							
	5			Rounding off whole numbers to the nearest tens	**The learner;** Identifies the required place values Rounds off numbers correctly	**The learner;** Reads, pronounces, spells and uses words -R.P.V -round off -tens							

5	1	Numeracy	Whole numbers	Rounding off whole numbers to the nearest hundreds	**The learner;** Identifies the required place value Rounds off the number correctly	**The learner;** Reads, pronounces, spells and uses words -hundreds -RPV -round off							
	2			Rounding off whole numbers to the nearest thousands	**The learner;** Identifies the required place values Rounds off the numbers correctly	**The learner;** Reads, pronounces, spells and uses words -thousands -RPV -round off							
	3			Changing Hindu Arabic numerals to Roman numerals	**The learner;** Identifies the Hindu Arabic numerals Writes the Roman numerals	**The learner;** Reads, pronounces, spells and writes Roman numerals							
	4			Converting Roman numerals to Hindu Arabic numerals	**The learner;** Identifies the Roman numbers correctly Writes the Hindu Arabic numeral correctly	**The learner;** Reads, pronounces, spells and writes Arabic numerals							
	5	Numeracy	Operation on whole numbers	Addition of whole numbers	**The learner;** Identifies the place values correctly Adds whole numbers up to 5 digits	**The learner;** Reads, pronounces, spells and uses words -add -sum -plus -regrouping -altogether							
6	1			Word application involving addition	**The learner;** Interprets the questions correctly Solves problems involving addition	**The learner;** Reads, pronounces, spells and uses words -add -plus -regrouping -altogether							

	2			Subtraction of whole numbers	**The learner;** Identifies the place values correctly subtracts whole numbers correctly	**The learner;** Reads, pronounces, spells and uses words **-**subtract -minus -take away -remove -regrouping -difference							
	3	Numeracy	Operation on whole numbers	Word application involving subtraction	**The learner;** Interprets the questions properly Solves problems involving subtraction	**The learner;** Reads, pronounces, spells and uses words -subtract -minus -take away -remove -regrouping -difference							
	4			Multiplication of whole numbers	**The learner;** Recites the multiplication tables Solves problems involving multiplications Multiplies numbers	**The learner;** Reads, pronounces, spells and uses words correctly -multiply -times -product							
	5			Word application involving multiplication	**The learner;** Interprets the statements correctly Solves problem involving multiplication	**The learner;** Reads, pronounces, spells and uses words -multiply -times -product							
7	1	Numeracy	Operation on whole numbers	Division of whole numbers	**The learner;** Identifies the operation symbol. Divides numbers correctly	**The learner;** Reads, pronounces, spells and uses words correctly -divide -share -quotient							
	2			Word application involving division	**The learner;** Interprets the statements correctly Divides numbers correctly	**The learner;** Reads, pronounces, spells and uses words -divide -share -quotient							

					Solves problems involving division								
	3		Patterns and sequences	Types of numbers	**The learner;** Identifies the number system Describes each number system Gives the examples	**The learner;** Reads, pronounces, spells and uses words -even -odd -whole -counting							
	4	Numeracy	Patterns and sequences	Number sequences (missing numbers)	**The learner;** Identifies the number system Fills in the patterns correctly	**The learner;** Reads, pronounces, spells and uses words							
	5			Multiples of numbers	**The learner;** Finds the multiples Writes the multiples	**The learner;** Reads, pronounces, spells and uses words -multiples							
8	1	Numeracy	Patterns and sequence	More about multiples of numbers	**The learner;** Finds the multiples Lists the multiples	**The learner;** Reads, pronounces, spells and uses words -multiples							
	2			Common multiples	**The learner;** Lists the multiples Identifies the common multiples	**The learner;** Reads, pronounces, spells and uses words correctly							
	3			Finding the lowest common multiples (LCM)	**The learner;** States LCM in full Finds the LCM of given numbers	**The learner;** Reads, pronounces, some of the key words							
	4			Factors of numbers	**The learner;** Descries a factor Finds factors of numbers	**The learner;** Reads, pronounces, spells key words -factor							

	5			More about finding factors	**The learner;** Describes a factor Finds factors of numbers	**The learner;** Reads, pronounces, spells and uses words correctly							
9	1	Numeracy	Patterns and sequences	Finding the Greatest Coommon Factor (GCF) or (HCF)	**The learner;** Describhes the GCF Finds the Common factors Writes the GCF	**The learner;** Reads, pronounces key words -GCF / HCF							