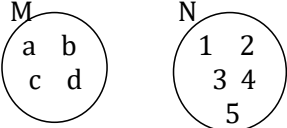
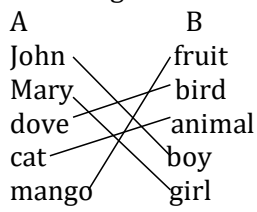




P.3 MATHEMATICS SCHEME OF WORK FOR TERM ONE

E.L.O: *The learner understands different ways of locating places and appreciates the various social groups in the Sub County / division.*

W K	P D	THEME	SUB THEME	CONTENT	COMPETE NCES	METHO D	ACTIVITIE S	INDICATO RS OF LIFE SKILLS AND VALUES	T/LAI DS	REF	R E M
1	1	OUR DIVISIO N	Name and location of our sub county	Sets A set is a collection of well-defined members. Naming and forming sets. a e i o u a set of vowels letters 0,1,2,3,4,5,6 A set of 7 numbers  A set of 4 pots	The learner -defines a set -names given sets -forms sets	- expositio n - demonstrat ion -problem solving think pair and share	-drawing sets -sorting elements	-effective communication -critical thinking - appreciation	-real objects -chalk board illustration	Mk pri Math Bk 3 page 1	

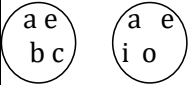
2			Comparing sets  Set M has 4 members Set N has 5 members Set N has more members than set M Set M has less members than set N	The learner -counts and finds the number of members in each set. -compares given sets using more or less	Brain storming -exposition -guided discussion	-sorting elements	-critical thinking -identity -problem solving	Real objects Chalk board illustration	Mk Primary Maths Bk 3 page 2 Understanding Maths Bk 3 page 2	
3			Matching sets  Set A and B are matching sets E F 1 → a 2 → b 3 → c Set E has 4 members Set F has 3 members Set E and F are non-matching sets	The learner -compares sets using matching and non-matching	-demonstration -guided discussion -exposition think pair and share	-matching sets -comparing sets using matching and non-matching	-belonging -problem solving	Chalk board illustration	Mk Primary math Bk 3 page 14-16	

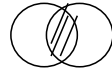
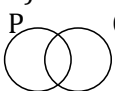
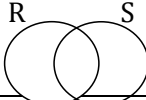
4		Types of sets and their symbols Type symbol Intersection $\cap$ Union set $\cup$ Empty set $\emptyset$ Equal set $=$ Not equal set $\neq$ Equivalent sets $\leftrightarrow$ Subset $\subset$ Universal set $\in$ No of elements $n()$ Non equivalent sets $\leftrightarrow$ Member of $\in$ Not a member of $\notin$	The learner -writes the symbol of each type set	-guided discovery -exposition	A learner -identifies and writes symbols of types of sets	- appreciation -identity	Chalk board illustration	Mk Primary Math Bk 3 page 11 Understanding maths bk 3 page 3
5		<u>Empty sets/ null sets</u> Empty sets are sets with out members or elements. Examples Set Q has no members therefore it is an empty set Set B = { cows with 10 ears each} set B is an empty set Set Q = { snakes with legs} Set Q is an empty set. Set Q is $\emptyset$	A learner -defines empty sets -identifies empty sets from given sets	- demonstration - exposition -guided discussion	-empty sets -identifying empty sets	-critical thinking -identity	-real objects -chalk board illustration	Mk Primary Math Bk 3 page 11 Understanding Math Bk 3 page 3

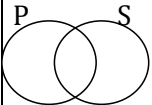
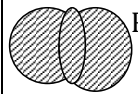
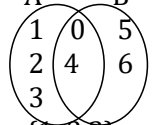
6			<u>Equal sets</u> Equal sets are sets that have the same and equal number of elements Examples $M = \{1, 2, 3, 4\}$ $N = \{3, 1, 4, 2\}$ Set M is equal to set N ($M = N$) $\text{Set } P = \{a, b, c, d, e\}$ $Q = \{d, e, b, a, c\}$ Set P is equal to set Q or $P = Q$	-defines equal sets -identify equal sets and gives examples of equal sets	- discussion - exposition - question answer	-defines equal sets -identifies equal sets	-logical thinking -identity -problem solving	Chalk board illustration	New Mk Pri MTC BK 3 page 5 Understanding Math Bk 3 page 5	
7			<u>Non equal sets</u> Non equal sets are sets that have the same type of members and different number of elements Examples $\text{Set } X = \{\text{shoes, spoons, cups}\}$ $Y = \{\text{shoes, flowers, spoons, cups}\}$ Set X is not equal to set Y $\text{Or } X \neq Y$ $\text{Set } P = \{a, e, i, o\}$ $Q = \{a, e, i, o, u\}$ Set P is not equal to set Q	-defines non equal sets -identifies non equal sets -suggests possible examples of non-equal sets	- exposition - discussion -guided discovery think pair and share	-defines non equal sets -identifies non equal sets from given sets	-identity - appreciation -logical thinking	Chalk board illustration	MK Primary MTC BK 3 page 6	

				Or $P \neq Q$							
2	1			<u>EQUIVALENT AND NON EQUIVALENT SETS</u> Equivalent sets are sets that have different elements but the same number of elements Example Set $P = \{a, e, i, o, u\}$ $Q = \{1, 2, 3, 4, 5\}$ Set P is equivalent to set Q Or $P \leftrightarrow Q$ Set $B = \{a, b, c, d\}$ $C = \{1, 2, 3, 4, 5, 6\}$ Set B is not equivalent to set C $B \nleftrightarrow C$ Note: Non equivalent sets have different number and the type of elements.	A learner -defines equivalent and non-equivalent sets -identifies equivalent and non-equivalent sets	- expositio n -guided discussio n	-defines equivalent and non-equivalent sets -identifies equivalent and non-equivalent sets	-identity -logical thinking -problem solving	Chalk board illustration	MK Primary MTC BK 3 page 5	
	2			Joint sets are sets that have members shared in common. Disjoint sets are sets that do not have members shared in common $A = \{a, b, c, d\}$ $B = \{a, e, i, o, u\}$	A learner -describes joint and disjoint sets -identifies members in joint sets	- expositio n -guided discussio n - demonstr ration	-defines equivalent and non-equivalent sets -identifies equivalent and non-	-identity -logical thinking -problem solving	Chalk board illustration -real objects	MK Primary MTC BK 3 page 5	

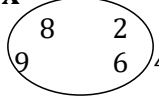
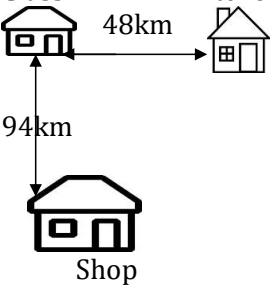
				A and B are joint sets $P = \{x,y,z\}$ $X = \{1,2,3,4\}$ P and X are disjoint sets			equivalent sets																			
	3			LISTING MEMBERS OF A SET/ COUNTING Examples P a b c d e P=5 elements set $P = \{a,b,c,d,e\}$ Set $Y = \{0, 2,4,6,8\}$ $N(Y) = 5$ elements	-lists members of a given set -finds the number of elements in a set	- explanation -brain storming	-listing members of a set -finding the number of members in a set	-problem solving	Chalk board illustration -real objects	MK Primary MTC BK 3 page 5																
	4	Physical feature of our sub county	COMPARING SETS USING EQUAL, NON EQUAL, EQUIVALENT, NON EQUIVALENT, <table> <tr> <td>C</td> <td>D</td> <td>E</td> <td>F</td> </tr> <tr> <td>0</td> <td>a</td> <td>4</td> <td>2</td> </tr> <tr> <td>2</td> <td>b</td> <td>2</td> <td>4</td> </tr> <tr> <td>4</td> <td>c</td> <td>0</td> <td>6</td> </tr> </table> Set C and D are equivalent sets Set D and E are matching sets Set E and F are not equal sets	C	D	E	F	0	a	4	2	2	b	2	4	4	c	0	6	-compares different given sets	-brain storming - exposition - explanation	-comparing different sets	-identity -critical thinking	Chalk board illustration	MK Primary MTC Bk 3 page 16	
C	D	E	F																							
0	a	4	2																							
2	b	2	4																							
4	c	0	6																							

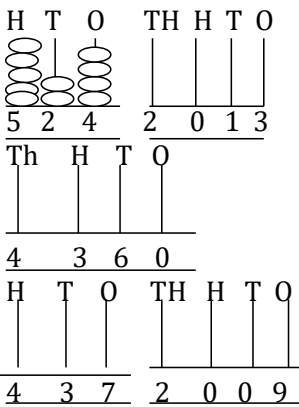
	5			Joining sets W X  a b c a e e o u i o a b c Y e o u $W + X = \{ a,e,b,c,a,e,i,o\}$ $X+Y = \{a, e, i, o, b, c,u\}$ $A\{0,1,2\} + B\{2,3,4\}=$ $A + B =\{0,1,2,3,4\}$ $Q=\{i,o,u\}$ $V= \{ d,e,f\}$ $Q+V= \{i,o,u,d,e,f\}$	-joins small sets to form a big set	- expositio n -guided discussio n	-joining set -sorting elements	-problem solving -critical thinking	Chalk board illustration	MK Prima ry MTC Bk 3 page 17	
	6	Our division	Physical features of our sub – county	UNION OF SETS Union set is a set containing all members of given sets with nomember repeated Example Set $X = \{a,b,c,d\}$ $Y = \{1, 2, 3, 4\}$ Find $X \cup Y$ $X \cup Y = \{a, b, c, d,1,2,3,4\}$	-defines union sets -finds union of given sets -counts the number of members -uses the symbol ($\cup$)	- expositio n - explanati on -guided discussio n	-defining a union set -shading the union region -finding union of sets	-critical thinking -problem solving	Chalk board illustration	MK Pri MTC Bk 3 page 18	
	7			Intersection of sets ($\cap$) Intersection of sets is a set that contains elements common to given sets	-defines intersection set -finds intersection	- demonst ration	-defining intersection sets	-critical thinking -problem solving	-chalk board illustration	MK Pri MTC Bk 3 page 18	

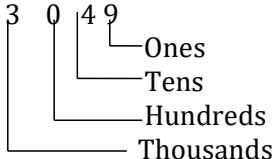
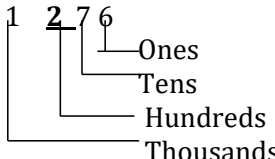
				Given that Set $W = \{ a,b,c,d,e\}$ $Z = \{a,e,i,o,u\}$ Find $W \cap Z$ $W \cap Z = \{a,e\}$ Set $P = \{ 0, 1, 4, 6, 8, 10\}$ $Q = \{ 1,2, 3, 4, 5, 6, 7\}$ What is $P \cap Q$? $P \cap Q = \{ 2, 4, 6\}$	n of given sets -counts the number of elements -uses the symbol ($\cap$)	- expositio n	-shading intersection region -finding intersection of given notes			
3	1		<u>VENN DIAGRAMS</u> <u>SHADING VENN DIAGRAMS</u> Examples i) shade $K \cap L$  ii) shade $P - Q$ / P only  etc	-shades the given regions -finds the difference in sets	- demonstratio n - expositio n	-describing the shaded region and finding the difference in sets	-critical thinking -problem solving	Chalk board illustration	MK Pri MTC Bk 3 page 18	
	2		Describing the shaded regions Examples i)describe the shaded part R  $R \cap S$	-describes the shaded region	- demonstratio n - illustrati on	-identifying the shaded region	-critical thinking -problem solving	Chalk board illustration	MK Pri MTC Bk 3 page 18	

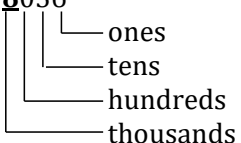
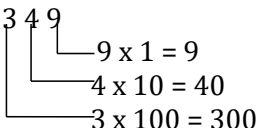
				 $P \cap S$ Set S is shaded $R \cap S$  $R \cap S$ is shaded							
3	Our environment	Physical features of our sub county	<u>DIFFERENCE OF SETS</u> A – B is a set of elements in A only not in B. A – B can also be called A only A-B is read as A difference B. (A-B) e.g  A-B = {1, 2,3} ii) Given that K = {a,b,c,d} P = { 1, 2, c,d} P-K = {1,2}	-describes difference s in sets -finds the difference in several sets -lists down members of given sets -counts members in given sets	- demonstration -guided discovery gallery walk	-describing difference of sets -shading given regions -finding the difference of sets	-identity -logical thinking -problem solving	Chalk board illustration	MK Pri MTC Bk 3 page 19		
4			<u>MORE ABOUT SETS</u>	-study the Venn diagram	- illustrati on	-answering questions about the	Logical thinking	Chalk board	MK Pri MTC Bk 3		



			Study the venn diagram below and answer questions X Y  Find i) $X \cap Y$ ii) $X \cup Y$ iii) $Y - X$ iv) $n(X \cup Y)$ v) list down members of set Y	and answer questions that follow	- explanation -brain storming	Venn diagram	-problem solving	illustration	page 19	
E.L.O: The child applies acquired skills and appreciated the benefits of participating in different activities										
5	Livelihood in our sub county	Occupations of people in our sub county division and their importance	The map journey Class kitchen  a) How far is the class from the kitchen b) Find the total journey from kitchen to the shop	A learner -identifies the journey in the school -finds the journey in addition	- explanation -guided discussion -brain storming	-reading the journey in the diagram - recognizing the distance	- assertiveness - recognizing effectiveness	- school structure -chalk board illustration	Thematic curriculum book 3 page 9	
6			Filling in missing numbers (in addition) a) 1,2,3,__, __, 6,7,8,9	-reviews counting up to 1000	Question and answer	Filling in missing numbers	Critical thinking	Chalk board	MK Primary MTC Bk 3	

			b) 30, 31, 32, __, __, 35, __, 37, 38 c) 200, 201, __, __, 204 <u>Missing numbers in subtraction</u> i) 30, 28, 26, 24, __, __ ii) 100, 98, 96, __, __ iii) 40, 30, 20, __ counting in twos and threes etc 0, 2, 4, 6, __, __ 0, 3, 6, 9, 12, __, __ 33, 36, 39, 42, __, __	and fill in missing numbers	-guided discussion		-problem solving	illustration	page 20	
	7	Soil	Writing numbers represented on the abacus 	-writes numbers represented on the abacus	- explanation -brain storming jigsaw	-writing numbers represented on the abacus	-creative thinking -effective communication	Chalk board illustration	MK Pri MTC Bk 3 page 9	
4	1		Identification of place values	-defines place value	- explanation	-defining place values	-identify	Chalk board	MK Pri MTC Bk 3	

				Place value is the position of a number in a given numeral. Write the place value of each digit in 3049 Th H T O 3 0 4 9  Ones Tens Hundreds Thousands The place value of 9 is ones The place value of 3 in 3049 is thousands The place value of 9 is ones The place value of 3 in 3049 is thousands	-writes the place value of given numbers -uses bundles to show place values	-guided discussion	-writing the place value of given digits in a numeral	- appreciation	illustration	page 35 Understanding Pri MTC Bk 3 page 11	
	2	Livelihood in our sub county	Writing place values of underlined digits Examples Th H T O 1 <u>2</u> 7 6  Ones Tens Hundreds Thousands	-writes place values of underline digits	-problem solving -guided discussion	-writing place values of underlined digits	-identify - appreciation	Chalk board illustration	MK Pri MTC Bk 3 page 35 Understanding Pri MTC Bk 3		

			The place value of 2 in 1276 is hundred ii) 8036  the place value of 8 in 8036 is thousands						page 11	
	3		Finding values Value is the size of a digit in a numeral/number. (how big) Exampales Find the value of each digit in 349 H T O 3 4 9  ii) What is the value of 6 in 2632? $Y = d \times p$ $6 \times 100 = 600$ The value of 6 in 2632 is 600 N.B $\rightarrow$ value = digit x place value	-defines a place values of underline digits	- explanati on - expositio n -guided discussio n	-defining a value -finding values of digits in several numbers	-critical thinking -problem solving	Chalk board illustration	Under standi ng Pri MTC Bk 3 page 10	

	4			WRITING FIGURES IN WORDS Examples Write in words <table><tr><td>H</td><td>T</td><td>O</td></tr><tr><td>7</td><td>8</td><td>9</td></tr></table> seven hundred eighty nine <table><tr><td>TH</td><td>H</td><td>T</td><td>O</td></tr><tr><td>3</td><td>5</td><td>4</td><td>6</td></tr></table> Three thousand five hundred forty six <table><tr><td>TH</td><td>H</td><td>T</td><td>O</td></tr><tr><td>2</td><td>0</td><td>3</td><td>4</td></tr></table> Two thousand thirty four <u>Note:</u> Tens and ones are read as one number	H	T	O	7	8	9	TH	H	T	O	3	5	4	6	TH	H	T	O	2	0	3	4	-gives each digit in a place value -writes given number figures in words	- explanation -guided discussion - exposition brain storming	-writing figures in words	-logical thinking -problem solving	Chalk board illustration	Under standing Pri MTC Bk 3 page 10
H	T	O																														
7	8	9																														
TH	H	T	O																													
3	5	4	6																													
TH	H	T	O																													
2	0	3	4																													
	5	Soil	Writing words in figures Examples 1. Two hundred twelve Two hundred = 200 Twelve = $\begin{array}{r} +12 \\ \hline 212 \end{array}$ 2. seven hundred fifty two. Seven hundred 700 Fifty two $\begin{array}{r} +52 \\ \hline 752 \end{array}$	-writes numbers in figures	- exposition - illustration -problem solving brain storming	-writing numbers in figures	-critical thinking -problem solving	Chalk board illustration	Under standing Pri MTC Bk 3 page 10																							

				3. three thousand four hundre six Three thousand = 3000 Four hundred = 400 Six = + 6 <u>3406</u>							
	6			Writing expanded place values in short Examples i) 3 hundred + 5 tens + 9 ones = 530 ii)500 + 30 + 0 = 359 iii) 8 tens + 4 ones = 84 (8 x 10) + (4 x 1) 80 + 4 = 84	-writes expanded place values in short	- expositio n -guided discussio n -problem solving	-writing expanded place values in short	-critical thinking -problem solving	Chalk board illustration	MK prima ry MTC BK 3 page 23	
	7			WRITING NUMBERS IN EXPANDED FORM USING PLACE VALUES Examples H T O 2 3 4 └─┬─┐One └─┬─┐Tens └───┐Hundreds 234 = 2 hundreds+ 3 tens + 4 ones	-writes numbers in expanded form using place values	-guided discussio n -problem solving	-writing numbers in expanded form using place values	-critical thinking -problem solving	Chalk board illustration	MK prima ry MTC BK 3 page 23	
5	1			Expanding numbers using values	-writes single	-problem solving	Expanding numbers	Logical thinking	Chalk board	MK prima	

				Examples i) 415 = 4 hundreds + 1 tens + 5 ones (4x100) + (1 x 10) + (5x 1) <u>400 + 10 + 5</u> ii)2389 = 2 thousands + 3 hundreds + 8 tens + 9 ones (2x1000) + (3 x100) + (8 x 10) + (9x 1) <u>2000 + 300 + 80 + 9</u> H T O iii) 7 0 8 = 7 hundreds + 0 tens + 8 ones <u>700 + 0 + 8</u>	numbers from expanded numbers	- expositio n -guided discussio n brain storming	using values		illustration	ry MTC BK 3 page 32	
	2	Natural causes of changes in the environment	Writing expanded numbers in short (single numeral) Examples What number is expanded to get i) 400 + 50 + 9 = 400 50 + 9 <u>459</u> - ii) 6000 + 300 + 50 + 8 6000	-writes single numeral from expanded numbers	-problem solving - expositio n -guided discussio n	-writing single numerals from expanded numbers	Problem solving Logical thinking	Chalk board illustration	MK primary MTC BK 3 page 32		

				300 50 + 8 6358																
	3	Changes in the environment through human activities	ROMAN NUMERALS 1→I 2→ II 3→III 4→ IV 5→V 6→ VI 7→VII 8→ VIII 9→IX 20 →XX 40→XL 50→ L	-writes basic Roman Numerals 1 -100 -names basic numerals -writes roman numerals got by repeating 1 and X	- expositio n -guided discovery -brain storming	Writing roman numerals for numbers 1-100	-identity - appreciatio n	A chart showi ng roma n nume rals Chalk board illustr ation	MK Prima ry MTC Bk 5 page 37											
	4		Basic numerals <table><tr><td>1</td><td>5</td><td>10</td><td>50</td><td>100</td></tr><tr><td>I</td><td>V</td><td>X</td><td>L</td><td>C</td></tr></table> Roman numerals got by repeating 1 and X 2 = 1 + 1 = II 20 = 10 + 10 = XX 3 = 1+1+1= III 30 = 10 + 10 +10 = XXX 35 =10 +10+10 +5 X + X + X + V =XXXV	1	5	10	50	100	I	V	X	L	C	-identify roman numerals by addition	Guided discover y - explanati on	-writing -reading -listing	-identity - appreciatio n	Chalk board illustr ation	MTC BK 5 page 37	
1	5	10	50	100																
I	V	X	L	C																

	5		Roman numerals got by addition or subtraction $6 = 5 + 1 = V + I = VI$ $7 = 5 + 2 = V + II = VII$ $40 = 50 - 10 = L - X = XL$	-writes Roman numerals by adding or subtracting	- explanation - exposition	-writing roman numerals by adding or subtracting	Logical thinking and responsibility	Chalk board illustration	MTC BK 5 page 37	
	6	Changes in the environment through human activities	CHANGING HINDU ARABIC TO ROMAN NUMERALS Examples $15 = 10 + 5 = X + V = XV$ $15 = XV$	-changes Hindu Arabic to Roman Numerals	-guided discussion - exposition -problem solving	-changing Hindu – Arabic to Roman Numerals	Problem solving Sharing Logical thinking	Chalk board illustration	MTC BK 5 page 37	
	7		CHANGING ROMAN NUMERALS TO HINDU ARABIC Examples $XXV = XX + V = 20 + 5 = 25$ ii) $XIV = X + IV = 10 + 4 = 14$	-changes Roman numerals to Hindu – Arabic	- explanation -problem solving Question and answer	-changing roman numerals to Hindu – Arabic	-logical thinking -problem solving	- chalk board illustration	MK Primary MTC Bk 5 Page 38	
6	1	Livelihood in our environment	Occupation of people in our sub-county and their importance <u>ADDITION OF 2 DIGIT NUMBERS</u> Examples 1. $39 + 40 = 79$ $\begin{array}{r} 39 \\ + 40 \\ \hline 79 \end{array}$ 2. Work out	-arranges and add the given numbers	-problem solving -guided discussion	-arranging and adding numbers	-identity - appreciation -problem solving	- chalk board illustration	MK Primary MTC Bk 5 Page 40	

			i) $\begin{array}{r} 37 \\ + 25 \\ \hline 62 \end{array}$ ii) $\begin{array}{r} 39 \\ + 61 \\ \hline 100 \end{array}$ iii) $\begin{array}{r} 48 \\ + 63 \\ \hline 111 \end{array}$						Under standi ng Pri MtC BK 3 page 16-17	
	2		Word problems Examples 1. Ashaba had 32 mangoes and her sister gave her more 17 mangoes.. How many mangoes did she have altogether? $\begin{array}{r} 32 \text{ mangoes} \\ + 17 \text{ mangoes} \\ \hline 49 \text{ mangoes} \end{array}$ Ashaba has 49 mangoes altogether	-reads, interprets and answers questions correctly.	-problem solving -guided discussion	-reading, interpreting and answering questions correctly	-identify - appreciation -problem	- chalk board illustration	MK Prima ry MTC Bk 5 Page 41	
	3		2. Find the sum of 67 and 46 $\begin{array}{r} 67 \\ + 46 \\ \hline 113 \end{array}$ 3. Okot had 55 cows. His brother had 38 cows. How many cows did they have altogether? $\begin{array}{r} 55 \text{ cows} \\ + 38 \text{ cows} \\ \hline \end{array}$	-reads, interprets and answers questions correctly.	-problem solving -guided discussion	-reading, interpreting and answering questions correctly	-identify - appreciation -problem	- chalk board illustration	MK Prima ry MTC Bk 5 Page 41	

				<u>9 3 cows</u> They had 93 cows altogether							
	4			Addition of 3 digit numbers Example i) $\begin{array}{r} 224 \\ + 315 \\ \hline 539 \end{array}$ ii) $\begin{array}{r} 182 \\ + 456 \\ \hline 638 \end{array}$ iii) add 62 + 369 $\begin{array}{r} 369 \\ + 62 \\ \hline 431 \end{array}$	-arranges gives numbers and answer questions correctly	-group discussio n question and answer -problem solving	-arranging numbers and adding correctly	- responsibil ity -problem solving	- chalk board illustr ation		
	5			WORD PROBLEMS Examples 1. A farmer picked 376 eggs on Monday and 462eggs Tuesday. How many eggs did he pick on the two days $\begin{array}{r} 376 \text{ eggs} \\ + 462 \text{ eggs} \\ \hline 838 \text{ eggs} \end{array}$ 2. A school has 248 boys and 724 girls. How many pupils are in the school? $\begin{array}{r} 248 \text{ boys} \\ + 724 \text{ girls} \\ \hline 972 \text{ pupils} \end{array}$	-adds numbers correctly -reads, interprets and answer question correctly	Question and answer -problem solving - discussio n	-reading, interpretin g and answering questions correctly	- responsibil ity -problem solving	Chalk board illustr ation	MK Prima ry MTC Bk 5 Page 44 Under standi ng Pri MTC BK 3 page 20	

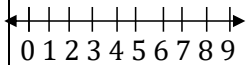
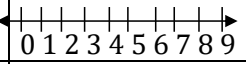
				There are 972 pupils in the school. 3. Find the sum of 200 and 84 $\begin{array}{r} 200 \\ + 84 \\ \hline 284 \end{array}$							
	6	Social services and their importance	ADDITION OF 4 AND 3 DIGIT NUMBERS Examples 1.add: 1684 + 215 $\begin{array}{r} 1\ 6\ 8\ 4 \\ + 2\ 1\ 5 \\ \hline 1\ 8\ 9\ 9 \end{array}$ 2. Find the sum of 4263 and 318 $\begin{array}{r} 4\ 2\ 6\ 3 \\ + 3\ 1\ 8 \\ \hline 4\ 5\ 8\ 1 \end{array}$ 3. There are 2410 pupils in Kato P?S and 1359 pupils in Katwe P?S. How many pupils are in the two schools $\begin{array}{r} 2\ 4\ 1\ 0\ \text{pupils} \\ + 1\ 3\ 5\ 9\ \text{pupils} \\ \hline 3\ 7\ 6\ 9\ \text{pupils} \end{array}$	-adds numbers correctly -reads, interprets and answer questions correctly	-problem solving -guided discovery brain storming	-adding numbers correctly -reading, interpreting and answering questions correctly	- responsibility -problem solving	Chalk board illustration	MK Primary MTC Bk 5 Page 47		
	7	Challenges in social services	Addition using a numberline Example	-adds numbers using a	-guided discovery	-adding numbers using a	- responsibility	Chalk board	New Mk 2000		

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			and their possible solutions	1. Add $4 + 3 = 7$ 0 1 2 3 4 5 6 7 8 9 2. add $3 + 5 = 8$ 0 1 2 3 4 5 6 7 8 9	number line	-problem solving	number line	-problem solving	illustration	Bk 3 page 55	
7	1			Multiplication using a number line e.g 2×3 $2 \times 3 = (3 + 3)$ 0 1 2 3 4 5 6 7 8 9 ii) 2×5 $2 \times 5 \rightarrow (5 + 5)$ 0 1 2 3 4 5 6 7 8 9 10	-multiplies using a number line -describes multiplication as repeated addition	-guided discovery - explanation - demonstration	-adding -forming steps -drawing a number line	-identity - responsibility -logical thinking -problem solving	A chart showing the number line	MK MTC book 3 page 44 and 56	

E.L.O: The child appreciates environmental changes and applies the acquired knowledge and skills to manage the environment

	2	Environment and weather in our sub-county	Air and the sun	Subtraction of 2 digit numbers a) subtract i) $78 - 35$ $\begin{array}{r} 78 \\ - 35 \\ \hline 43 \end{array}$ ii) $93 - 58$ $\begin{array}{r} 93 \\ - 58 \\ \hline 35 \end{array}$	-subtracts given numbers	-guided discovery -problem solving	- subtracting given numbers	- responsibility -problem solving	Chalk board illustration	MK Pri Mtc Bk 3 page 48	
	3		Air and the sun	WORD PROBLEM a. Sungura had 65 cows. He sold 43 cows. How many cows remained? $\begin{array}{r} 65 \text{ cows} \\ - 43 \text{ cows} \\ \hline 22 \text{ cows} \end{array}$ b) In a box, there were 73 mangoes. 28 of them were bad. How many mangoes were good? $\begin{array}{r} 73 \text{ mangoes} \\ - 28 \text{ mangoes} \\ \hline 45 \text{ mangoes} \end{array}$	-reads, interprets and answers questions correctly	-guided discussion -problem solving	-reading, interpreting and answering questions	Logical thinking -problem solving	Chalk board illustration	MK Pri Mtc Bk 3 page 48	
	4			Subtraction of numbers by re-grouping Examples	-subtracts numbers correctly	-guided discussion	Subtracting numbers correctly	-logical thinking -problem solving	Chalk board illustration	MK Pri Mtc Bk 3	

				Subtract a) $\begin{array}{r} 136 \\ - 86 \\ \hline 50 \end{array}$ b) $\begin{array}{r} 441 \\ - 268 \\ \hline 173 \end{array}$		-problem solving				page 48	
	5 a n d 6		Air and the sun	SUBTRACTION OF 4 DIGIT NUMBERS AND 4 PLUS WORD PROBLEMS Examples Work out; a) $\begin{array}{r} 2432 \\ - 1311 \\ \hline 1121 \end{array}$ b) $\begin{array}{r} 4567 \\ - 1239 \\ \hline 3328 \end{array}$	-subtracts numbers correctly -reads interprets and answers questions	-guided discussion -problem solving	- subtracting numbers correctly	Logical thinking -problem solving	Chalk board illustration	MK Pri Mtc Bk 3 page 52-54	
	7			Subtraction using a numberline Examples 7 -4 = 3  8 -6 = 2 	-subtracts numbers using a number line	- explanation -guided discovery -problem solving	-- subtracting numbers using a number line	-logical thinking - responsibility -problem solving	Chalk board illustration	MK Pri Mtc Bk 3 page 52-54	
8	1			Multiplication of digit numbers Find the product of i) 3 and 5 $3 \times 5 = 15$ $4 \times 3 = 12$ $3 \times 5 = 15$ $3 \times 6 = 18$ $9 \times 5 = 45$ $7 \times 4 = 28$ $8 \times 7 = 56$	-finds the product of 1 digit numbers	Brain storming -guided discovery -problem solving	-finding the product of numbers	Logical thinking Problem solving	Chalk board illustration	MK Pri Mtc Bk 3 page 55	

2			Multiplication of 2 digit numbers with or without regrouping Examples Multiply: 3 4 4 1 3 4 X 2 x 5 x 3 <u>6 8</u> <u>2 0 5</u> <u>1 0 2</u> 1 7 7 8 X 2 x 3 <u>3 4</u> <u>2 3 4</u> ____	-multiplies 2 digit numbers with 1 without regrouping	Explanation -guided discovery -problem solving	-multiplies 2 digit numbers with 1 without regrouping	- explanation -guided discovery -problem solving	Multiplying 2 digit numbers with 1 without regrouping	MK Primary Mtc Bk 3 page 55
3			Multiplication of 2 digit numbers with 1 Example 1 2 4 3 2 1 x 2 x 3 <u>2 4 8</u> <u>9 6 3</u> 4 1 2 3 4 1 X 4 x 5 <u>1 6 4 8</u> <u>1 7 0 5</u>	-multiplies 3 digit numbers with 1	-guided discovery -problem solving -brain storming	- Multiplying 3 digit numbers with 1	Logical thinking Problem solving	Chalk board illustration	MK Primary MTC BK 3 page 67 -68
4			Word problems on multiplication Examples 1. There are 7 days in a week. How many days are in 4 weeks? 1 week = 7 days 4 weeks = 4 x 7 = 28 days 2. In a dozen, there are 12 items. How	-reading the word problems -identifying the digits from the words	Guided discovery	Reading -identifying	-logical thinking	Chalk board illustration	MK Primary MTC bk 3 page 67 - 68

				many items are in 6 dozens? 1 2 <u>X 6</u> <u>72 items</u>															
	5		Water	Rose gave 3 books to each pupil in P.3. If there are 41 pupils in P.3, how many books did Rose give out? 4 1 <u>X 3</u> <u>123 books</u> Rose gave out 123 books	-reads, interprets and answers questions correctly	-guided discovery -problem solving	-reading , interpreting and answering questions correctly	-logical thinking -problem solving	Chalk board illustration	MK Primary MTC bk 3 page 69 - 71									
	6			Multiplication puzzles X 1 2 3 4 5 6 1 1 2 3 4 5 6 2 2 4 6 8 10 12 3 3 6 9 12 16 18 4 - - - - - 5 6 10 15 20 25 30 2 x 2 = 4 3 x 2 = 6 4 x 2 = 8 5 x 3 = 15 4 x 5 = 20	-multiplies numbers in the multiplication puzzle	-guided discovery -problem solving	- multiplying to find missing numbers in the multiplication puzzles	- responsibility -creative thinking -problem solving	Chalk board illustration	MK Primary MTC bk 3 page 69 - 71									
	7			MAGIC SQUARES Fill in the missing numbers in the magic squares <table><tr><td>7</td><td>a = 0</td><td>5</td></tr><tr><td>b = 2</td><td>4</td><td>c = 6</td></tr><tr><td>3</td><td>d = 8</td><td>1</td></tr></table>	7	a = 0	5	b = 2	4	c = 6	3	d = 8	1	-finds the total sum -forms and solves equations to find unknowns	-guided discovery - explanation	-finding the total sum -forming and solving equations	-logical thinking -identify -problem solving	-chalk board illustration	MK Primary MTC bk 3 page
7	a = 0	5																	
b = 2	4	c = 6																	
3	d = 8	1																	

				Sum = 3 + 4 + 5 = 12 a + 7 + 5 = 12 a+ 12 = 12 a = 12 -12 a = 0 b + 7 + 3 =12 b + 10 = 12 b = 12-10 b = 2 c + 5 + 1 = 12 c + 6 = 12 c = 12-6 c= 6 d + 3 + 1 = 12 d + 4 = 12 d = 12 -4 d= 8	in the magic sum	-problem solving brain storming				69 - 71	
9	1 and 2		Water	Division of 1 digit number by 1 with no remainder Examples 1. Divide 8 by 2 4 2 8 - 8 18÷ 3= 4	-divide 1 digit numbers by 1	- demonstration - exposition -problem solving	Dividing 1 digit number by 1	Problem solving	-chalk board illustration	MK Primary MTC bk 3 page 73	
	2			Division of 1 digit number by 1 with a remainder 2. share 9 mangoes between 2 boys	The learner divides one digit number by 1	Explanation Exposition	Dividing 1 digit number by 1	Problem solving	-chalk board illustration	MK Primary MTC bk 3	



			$\begin{array}{r} 6r1 \\ 29 \overline{) 246810} \\ \underline{-8} \\ 1 \end{array}$	a)with a remainder b)without a remainder	Problem solving				page 73	
			Divide $7 \div 3$ $\begin{array}{r} 2r1 \\ 3 \overline{) 7} \\ \underline{-6} \\ 1 \end{array}$ 3, 6, 9,12 -6 1 = 2 r 1							
	3		Division of 2 digit numbers by 1 with no remainder Examples i) $22 \div 2$ $\begin{array}{r} 11 \\ 2 \overline{) 22} \\ \underline{-2} \\ 0 \end{array}$ $2 = 11$ $22 \div 2 = 11$ iii) $70 \div 7$ $\begin{array}{r} 10 \\ 7 \overline{) 70} \\ \underline{-7} \\ 0 \end{array}$	-divides digit numbers by 1 using long division a) Without a remainder b) without the remainder	- explanation - exposition -problem solving	Dividing 2 digit numbers by 1	Sharing -logical thinking -problem solving	-real objects -chalk board illustration	MK Primary MTC bk 3 page 73	`

	4		Division of 3 digits by 1 with no remainder Divide 42 by 3 $\begin{array}{r} 14 \\ 3 \overline{)42} \\ \underline{-3} \\ 3,6,9,12,15,18 \\ 12 = 14 \\ \underline{-12} \\ \text{Share } 120 \text{ by } 5 \\ \begin{array}{r} 24 \\ \underline{5 \overline{)120}} \\ -10 \\ \underline{} 20 \\ -20 \\ \underline{} 0 \end{array} = 24 \end{array}$	-divides 2 digit numbers by 1 using long division	- exposition -guided discovery -problem solving mental work	-dividing 2 digit numbers by 1	Sharing -problem solving	Real objects -chalk board illustration	MK Primary NTC Bk 3 page 73-73	
	5		With a remainder e.g divide $123 \div 2$ $\begin{array}{r} 61 \text{ r}1 \\ 2 \overline{)123} \\ \underline{-0} \\ 12 \\ \underline{-12} \\ 00 \downarrow \\ 3 \quad 61\text{r}1 \\ \underline{-2} \\ 1 \end{array}$	-divides 2 digit numbers by 1 using long division	- exposition -guided discovery -problem solving	-dividing 2 digit numbers by 1	Sharing -problem solving	Real objects -chalk board illustration	MK Primary NTC Bk 3 page 73-73	
	6	Managing water	Word problem Examples Share 32 pencils equally amongst 4	-reads, interprets and answers	Explanation Guided discovery	Reading, interpreting and answering	Critical thinking -effective communication	Chalk board illustration	MK Primary MTC Bk 3 page 76-77	

			boy. How many pencils does each get? $\begin{array}{r} 8 \\ 5 \overline{) 32} \\ \underline{40} \\ - 32 \\ \hline = 8 \end{array}$ Each gets 8 pencils 2. There are 125 pencils to be shared by 5 girls. How many sweets does each get? $\begin{array}{r} 25 \\ 4 \overline{) 125} \\ \underline{10} \\ 25 \\ \underline{25} \end{array}$	questions correctly -divided numbers using long division correctly	Problem solving	questions correctly				
	7		ALGEBRA i)with addition a) $\square + 3 = 9$ b) $\square + 8 = 13$ $9 - 3 = 6$ $13 - 8 = 5$ c) $6 + \square = 10$ $= 10 - 6$ $= 4$	Solves for the unknown	Explanation Guided discovery Problem solving	-solves for the unknown	-logical thinking -problem solving	Chalk board illustration	MK Pri MTC Bk 3 page 192	` `
10	1		With subtraction $\square - 3 = 7$ $\square = 7 + 3$ $\square = 10$ $\square - 8 = 5$ $\square = 5 + 8$	-solves for the unknowns	-guided discovery -problem solving	Solving for the unknown	Logical thinking Problem solving	Chalk board illustration	MK Pri MTC Bk 3 page 194	

				=13 - 2 = 6 = 6+ 2 = 8		- expositio n					
	2			iii) with Multiplication x 3 = 15 4 x = 28 =15÷3 =24÷4 =5 = 7 X 2 =16 x 8 = 40 =16 ÷ 2 = 40÷ 8 =8 =5	-solves for unknowns with division signs	-guided discover y -problem solving - expositio n	Solving for the unknown	Logical thinking Problem solving	Chalk board illustr ation	MK Pri MTC Bk 3 page 194	
	3 a n d 4			With division Examples 8÷ =2 = 8÷2 =4 24 ÷ = 4 = 24÷ 4 = 6 ÷ 3 =6 =6 x 3 = 18 With multiplication a)3x ____ 12 ____ = 12÷3 ____ = 4 b)m x 5 = 20 m = 20÷5 m= 4	-solves for the unknowns	-guided discover y -problem solving - expositio n	Solving for the unknown	Logical thinking Problem solving	Chalk board illustr ation	MK Pri MTC Bk 3 page 194	

5	Managing charges	More on Algebra a) $5 - \square = 3$ $5 - 3 = \square$ $\square = 5 - 3$ b) $9 - \square = 2$ $\square = 9 - 2$ $\square = 5$	A learner; -finds the unknowns -fills the unknown number in the spaces given -solves all the algebraic expression given	-guided discovery -brain storming - question and answer	- subtracting -brain storming -filling in -solve problems	- effectiveness -logical thinking -creative thinking	Chalk board illustration	Guide d curr Bk 3 page 39 MK Pri MTC Bk 3 page 194	
6		Find the unknown i) $8 - y = 4$ $8 - 4 = y$ $y = 4$ ii) $12 - p = 3$ $12 - 3 = p$ $p = 12 - 3$ $p = 9$	A learner; -finds the unknowns -fills the unknown number in the spaces given -solves all the algebraic expression given	-guided discovery -brain storming - question and answer	- subtracting -brain storming -filling in -solve problems	- effectiveness -logical thinking -creative thinking	Chalk board illustration	Guide d curr Bk 3 page 39 MK Pri MTC Bk 3 page 194	
7		Find the unknown (division) i) $9 \div 3 = \square$ $\square = 9 \div 3$ $\square = 3$	A LEARNER -finds the unknowns -fills the unknown number in	-guided discovery -brain storming	- subtracting -brain storming -filling in	- effectiveness -logical thinking	Chalk board illustration	Guide d curr Bk 3 page 39	

				ii) $12 \div \square = 4$ $\square = 12 \div 4$ $\square = 3$ iii) $14 \div k = 7$ $k = 14 \div 7$ $k = 2$	the spaces given -solves all the algebraic expression given	- question and answer	-solve problems	-creative thinking		MK Pri MTC Bk 3 page 194	
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