P.4 Transition Mathematics Scheme Term I - 2024

Wk	Pd	Theme	Content	Life skills	Competence	Activities	Learning materials	Method	Resources	Rm
1	**HOLIDAY WORK**									
	1 & 2	Set concepts	Definition of a set - A collection of well defined objects. Types of sets & their set symbols - *Union of sets (∪)* Two or more sets put together union - *Intersection of joint sets (∩)* Common members in the given sets. - *empty sets {} or ∅* Sets which have no members - *Equal or identical set(=)* sets with the same numbers or members of the same kind. - *Equivalent or matching set(↔)* equal number of members but of different kinds - *Disjoint or non – intersecting sets* sets without common members - *Non – Equivalent sets/ Un equal sets* Sets whose members are not matching *Non Equal / Un Equal sets* Any set whose members are not equal	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i. Define a set & different types of sets ii. Naming the different types of sets. iii. Draw the different set symbols. iv. Identify given sets with their symbols. v. Give examples of given sets in real life situations.	Defining sets. Identifying sets Giving examples of sets Doing written exercises.	- books, pencils, pieces of chalk etc. - Text books. -chalkboard	- Demonstration - Discussion - Exposition	- A new MK Pri. Maths 2000 Bk 4 pgs 8 – 1 - Understanding Maths Bk 4 pages 1 - 12	

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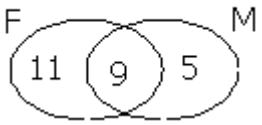
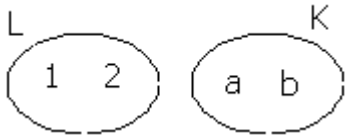
	3 & 4	Set concepts	- Equal and *Equivalent sets* i). A = {a,b,c} B = {b,a,c} A = B ii. J = {a,t,y}, K = {1,2,3} set J ↔ Set K	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i. Identify equal sets. ii. Identify equivalent set iii. Use the set symbols correctly	Identifying sets Using set symbols. Doing written exercises.	- books, pencils, Rubbers - Ruler. - Text books. -chalkboard	- Discussion - Exposition	- A new MK Pri. Maths 2000 Bk 4 pgs 8 – 18 - Understanding Maths Bk 4 pages 1 - 12	
	5 & 6		Intersection of sets and Disjoint sets e.g.  F∩M = {9}  L and K have no common members. They are disjoint set. L∩K = {}		Write and draw intersection sets. Write and draw disjoint sets. Identify intersection and disjoint sets from the given sets.	Writing sets Identifying sets Drawing sets Doing written exercises.				
2	7 & 8		Union of sets e.g A = {a,x,e} B = {a,p,e,x}		Pupils should be able to: i. Write union sets correctly. ii. Draw union sets correctly iii. Identify common members and use the correctly.		Pencils Rubbers Books Schoolbags Pieces of chalk Text books	- discussion -Exposition -Guided - Discovery	MK Maths 2000 Bk 4 pag 8 – 18 MTC Bk 4 pg 12	
3	1 & 2		The empty set. e.g a set of birds with four legs each. This set does not exit. So it is {}		Pupils should be able to: i. Give examples of empty sets. ii. Write empty sets, iii. use the symbol for empty set correctly.	Giving examples of empty sets Writing empty sets Identifying empty sets				

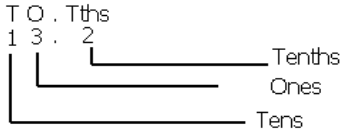
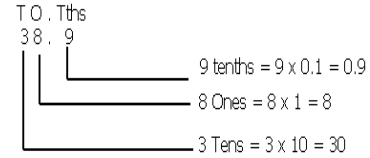
Wk	Pd	Theme	Content	Life skills	Competence	Activities	Learning materials	Method	Resources	Rm
3	3 & 4	Set concepts	Venn diagrams. - Shading regions of sets. e.g set A set B set A – B Set B – A set A ∪B Set A∩B	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i. Shade region of sets on Venn diagrams	Shading regions on Venn diagrams	-chalkboard	- Discussion - Exposition	- A new MK Pri. Maths 2000 Bk 4 pgs 8 – 18 - Understanding Maths Bk 4 pages 1 - 12	
	5 & 7		- Using Venn diagram to solve problems. - Listing members from Venn diagrams - Using listed members to fill the Venn diagram. - Finding numbers of required members using n(A). - Difference of sets		Pupils should be able to: - List required members from the Venn diagram. - Use the given sets to fill the Venn diagrams - Use the expression n(A) correctly. - Use the expression A – B	Listing members from the Venn diagram. Filling in missing members in Venn diagrams. Doing written exercises.	Text books chalkboard	- discussion - Exposition - Guided discovery		
3	8		Revision on sets. - types of sets. - set symbols. - Venn diagrams.		Pupils should be able to: Do the given revisions exercise within the given time.	Writing out the revision exercise	Handouts Text books	- guided -discovery	Primary Maths 200 Bk 4 pg 16 -	

4	1 & 2	The numeration system and place value	Representing whole numbers on an abacus e.g Representing whole numbers on the abacus Reading whole numbers from the abacus Reading whole numbers from the abacus. - Finding place value of numbers. E.g What is the place value of 5 in 1576 Th H T O 1 5 7 6 Hundreds The place value of 5 is hundreds.		Pupils should be able to: - Represent whole numbers on an abacus. - Read the numbers represented on given abaci. - Find place values of given numbers.	- Representing numbers on abaci. - Drawing abacii. - Reading numbers from an abacus. - Finding place values of digits on an abacus.	Abacii Text books chalkboard	- Discussion - Exposition - Guided discovery	A new Mk Pri. Maths 2000 Bk 4 Pg 19 - 20	

Wk	Pd	Theme	Content	Life skills	Competence	Activities	Learning materials	Method	Resources	Rm
4	3 & 4	The numeration system and place value	Finding total values. e.g 3 tens + 6 thousands. (3 x10)+ (6 x 1000) = 6000 +30 6030	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i. work out total values of numbers	Working out total values of given numbers.	- Text books -chalkboard	Discussion - Exposition	- A new MK Pri. Maths 2000 Bk 4 pgs 19 - 23	
	5 & 6		Find products with values. e.g 2 tens x 4 = 2 x 10 x 4 = 20 x 4 = 80		Pupils should be able to: i. Multiply values correctly	Multiplying values of given numbers	Text books chalkboard	- discussion Exposition observatio n		
	7 & 8		Writing figures in words. E.g H T O 6 3 7 600 = six hundred 30 = thirty 7 = seven. = six hundred thirty seven.		Pupils should be able to: - Write figures in words, laying out all the necessary steps.	Writing figures in words	Text books chalkboard	Discussion Exposition		

5	1 & 4		Writing words in figures. e.g Five thousand two hundred Seven. TH H T O Five thousand = 5 0 0 0 Two hundred = 2 0 0 Seven = + 7 5 2 0 7		Pupils should be able to: - Write words in figures, laying out all the necessary steps.	Writing words in figures..				
5	5 & 6		Expanded form. e.g 48 = (4 x10) + (8x1) = 40 + 8 13540 =(10000x1) +(3 x 1000) + (5x100)+(4x1). 13504 = 10000+3000+500+4		Pupils should able to: - Expand given numbers using values.	Expanding numbers using values		Discussion Exposition Observation		
	7 & 8		Finding expanded numbers. e.g 700 + 70 + 7 = 7 0 0 7 0 + 7 7 7 7		Pupils should be able to: - work out expanded numbers.	Working out expanded numbers		Discussion exposition		

Wk	Pd	Theme	Content	Life skills	Competence	Activities	Learning materials	Method	Resources	Rm
6	1 & 2	The numeration system and place value	Decimals A whole number divided into ten - equal parts - Decimal names. 1 part = = 0.1 Comparing decimals Using number lines. Using symbols < or >	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i. Define decimals. ii. Name decimals correctly. iii. Write decimals correctly. iv. Draw number lines & compare decimals on them. Use > ,= or < to compare decimals	Defining decimals Writing decimals comparing decimals.	- Text books -chalkboard Number lines	Discussion - Exposition Discovery	- A new MK Pri. Maths 2000 Bk 4 pgs 19 - 23 Und. MTC 4 pg 22 - 24	

	3 & 4		Place values of whole & decimals. E.g 13.2 Whole decimals  		Pupils should be able to : i. Represent decimals on an abacus ii. Read decimal numbers from an abacus. iii. Find the place values of given decimal numbers.	Reading decimal numbers. Finding place values of decimal numbers.	Text books chalkboard		Und. MTC 4 pg 26	
	5 & 6		Values of wholes and decimals e.g find the value of each numeral in 38.9  		Pupils should be able to find the values of given decimal numbers.	Finding values of decimal numbers.	Text books chalkboard		A new MK Pri. Maths 2000 Bk 4 pg 29	
			Writing decimals in words. e.g 7.5 = O. Tths = 7. 0 = seven + 0. 5 = five tenths 7. 5 7.5 = seven and five tenths or 7.5 = seven point five. **Writing decimals in figures.** e.g two hundred seventy five and two tenths. Two hundred seventy five = 275.0 two tenths = 0.2 275.2		Pupils should be able to: i. Express decimals in words. ii. Express decimal in figures	Writing decimals in words and in figures		Discussion Exposition	A new MK Pri. Maths 2000 Bk 4 pg 30 – 31 Und. Mtc 4 pg 27	

8	1 & 2	The numeration system and place value	Numbers and numerals. A numbers is an idea of quantity A number is a symbol representing a number. Hindu – Arabic & Roman numeral (up to 100) Key symbols. I V X L 100 C - Roman symbols which are formed, by adding key symbols. e.g XX, LX, VI, etc by subtracting key symbols. e.g IX, XL, XC, IV, etc.	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i. differentiate between a number. ii. Write Roman numerals up to 100 (C)	Defining numerals & numbers. Writing Hindu Arabic and Roman numerals. Doing written exercises.	- Text books -chalkboard	Discussion - Exposition	- A new MK Pri. Maths 2000 Bk 4 pgs 32 - 33 Und. MTC 4 pg 28 - 29	
	3 & 4		Changing from Hindu Arabic to Roman numerals. Expand then change 19. 19 = 10 + 9 = X + IX. = XIX		Pupils should be able to change: i. Change Hindu Arabic numerals into Roman numerals.	Changing Hindu Arabic numerals into Roman numerals.			- A new MK Pri. Maths 2000 Bk 4 pgs 32 - 33	
	5 & 6		Changing from Romans to Hindu Arabic numerals. Change XLVII = XL + VII. XL = 60 VII = + 7 XLVII = 67		Pupils should be able to: i. Change Roman numerals into Hindu Arabic numerals.	Changing Roman numerals into Hindu Arabic numerals.				
	7 & 8		Word problems in Hindu Arabic a & Roman numerals. - Jane is X years old. Mary is V years old. Find their total age & write the answer in Hindu Arabic. - X + V = 10 + 5 years = 15 years Their total age is 15 years.		Pupils should be able to: i. Solve word problems involving Hindu Arabic and Roman numerals correctly	Working out word problems			A new MK Pri. Maths 2000 Bk 4 pgs 33 - 35	

9	1 & 2	Operation on Numbers & notation	Addition of whole numbers Without regrouping e.g TTH TH H T O 3 5 1 0 0 0 1 3 5 with regrouping		Pupils should be able to: - Add whole numbers correctly. - Add decimal numbers correctly.	Adding whole & adding whole & decimal numbers.			Und. MTC 4 pg 30	

Wk	Pd	Theme	Content	Life skills	Competence	Activities	Learning materials	Method	Resources	Rm
9	1 & 2	Operation on Numbers & notation	With regrouping TTH TH H T O 3 7 2 1 10 3 4 5 14 0 6 6 With decimal numbers. E.g H T O. Tth 2 4 0. 3 + 2 5. 0 2 4 5 . 3 H T O. Tth 2 1. 7 8 4. 5 10 6. 2	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i. Add whole numbers correctly. ii. Add decimal numbers correctly	Adding whole and decimal numbers.	- Text books -chalkboard	Discussion - Exposition Discovery	- A new MK Pri. Maths 2000 Bk 4 pgs 19 - 23 Und. MTC 4 pg 22 - 24	
	3 & 4		Application of addition in word problems. i. Key words. ii. Sum, total, add, greater, increase		Pupils should be able to: i. work out word problems in addition	Solving word problems in addition		- discussion exposition	MK Bk 4 pg 40 – 41 & 42-44 , 45 Und. MTC 4 pg 31 – 34,35-36, - 40	
	5 & 6		Subtraction of numbers. Without regrouping. 1 5 7 1 2 4 0 1331 - with regrouping 72561 - 4500 68061		Pupils should be able to: i). Subtract whole numbers correctly. ii). Subtract decimal numbers correctly	Subtracting whole numbers & decimal numbers correctly	Text books chalkboard	Discussion Exposition		

	7 & 8		Application of subtraction in words problems. Key words Subtract, reduce, difference, less, remainder, change, balance.		Pupils should be able to: I solve word problems in subtraction	Working out word problems in subtraction				
10	1		Multiplication of whole numbers. - using repeated addition. Up to 4 digits by 1 digit		Pupils should be able to: i). Multiply numbers up tp 4 digits by 1 digit. ii). Use the concept of factor 10 to compute multiplication problems	Multiplying numbers.			A new MK Pri. Maths 2000 Bk 4 pg 64 - 65	

10	2	Operation on Numbers & notation	Multiplication of whole numbers. e.g 1420 x 5 7100 - Using the concept of factor 10 to compute numbers. e.g 20 x 20 = 200 x2 = 400	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i). Multiply numbers up tp 4 digits by 1 digit. ii). Use the concept of factor 10 to compute multiplication problems	Multiplying numbers.	Text book chalkboard	Discussion Exposition	A new MK Pri. Maths 2000 Bk 4 pg 64 - 65	
	3 & 4		Application of multiplication in word problems. - Key words. Multiply, product.		Pupils should be able to: i). Solve word problems in multiplication.	Working out word problems in multiplication			A new Mk Pri. Maths 2000 Bk 4 pg 47	
	5 & 6		Multiplication of two by two digit numbers Using total values. Side work e.g 15 (15 x 2) + (15 x 10) x 12 30 + 150 30 +150 180		Pupils should be able to: i). Use total values to solve two by two digit multiplication problems.	Multiply two by two digit numbers using place values			A new Mk Pri. Maths 2000 Bk 4 pg 46	
	7 & 8		Using place values. (compute) e.g 18 x 12 36 180 216		Pupils should be able to: i). Use the short method to multiply two by two digit numbers.	Multiplying two by two digit numbers using the short methods.	Text books chalkboard	Discussion Exposition	A new Mk Pri. Maths 2000 Bk 4 pg 51 – 53, 45	

11	1 & 2		Division of whole numbers. - Using repeated subtraction. e.g 9 ÷ 3; 9 – 3 = 6 6 – 3 = 3 3 – 3 = 0 The no. of times 3 has been subtracted from 9 is 3. So 9 – 3 = 3 Using long division without remainders. (up to 4 digits by 1)		Pupils should be able to: i). Use repeated subtraction to solve division problems. ii). Compute answer for simple division problems. iii). Use long division to solve division problems.	Solving division problems in without remainders.				
	3 & 4		With remainders. Eg 10 ÷ 4 = 2 rem. 2 Using lng division with remainders e.g 130		Pupils should be able to: Solve division problems with remainders	Solving division problems in with remainders				
	3 & 4		e.g 130 450 - 3 15		Pupils should be able to: Solve division problems with remainders	Solving division problems in with remainders	Text books chalkboard	Discussion Exposition		
	5 & 6		Application of division in word problems Key words. Divide, share		Pupils should be able to: Solve word problems in division	Solving division word problems	Text books Chalkboard		MK 2000 Bk pg 55	
11	7 & 8	Number patterns and sequences.	Types of numbers. - whole numbers. 0,1,2,3,……. - counting numbers. 1, 2,3,…… - Ordinal numbers. 1st, 2nd, 3rd - cardinal numbers. 1,2,3,4,5, …… - Even numbers 0,2,4,6,8…… - odd numbers 1,3,5,7,9…….	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i). Define the different types of numbers. ii). List members of each type of numbers. iii). Distinguish different types of numbers from others. iv). Answer various questions about types of numbers. v). Define even and odd numbers clearly.	- Defining numbers Listing different - Listing different types of numbers. - Distinguish sets - Answering questions about different types of numbers. - Defining even & old numbers - Giving examples of even & old no.		Discussion Observation Exposition	A new Mk Pri. Maths 2000 Bk 4 pg 61., 58 - 60	

12	1 & 2		Number patterns & sequences. e.g 1,3,5,7,9 - Building sequences with even, odd or prime numbers. - counting in tens, hundreds, thousands.		Pupils should be able to: i). complete number sequences correctly.	Completing & building up number sequences.	Textbooks Chalkboard	Discussion Exposition	MK Maths 2000 Bk 4 pg 60 - 62 Under MTC 4 pg 83 - 92	
	3 & 4		Factors. A number which divides into another exactly. e.g 2 x 3 = 6 2 & 3 are factors of 6 bec. 6÷ 3 = 2 6÷ 3 = 2 others are 6 ÷ 1 = 6		Pupils should be able to: i). Define a factor ii). Find factors of numbers. iii). Complete all the given factor charts. iv). Find the GCF of given numbers.	Finding factors. Completing factor charts Finding GCF of numbers	Textbooks Chalkboard A drawn factor chart		MK Maths 2000 Bk 4 pg 68 - 69 Under MTC 4 pg 96	

12	3 & 4	Number facts & sequences	So F_6 are 1 x 6 = 6 2 x 3 = 6 F_6 = {1,2,3,6} - Giving lists of factors. - Factor charts. - Greatest common factors (GCF)	- Logical thinking - Problem solving critical thinking	Pupils should be able to: i). Define a factor ii). Find factors of numbers. iii). Complete all the given factor charts. iv). Find the GCF of given numbers.	Finding factors. Completing factor charts Finding GCF of numbers	Textbooks Chalkboard A drawn factor chart	Discussion Exposition	MK Maths 2000 Bk 4 pg 59 - 63 Under MTC 4 pg 97 - 98	
	5 & 6		Multiple Numbers which when divided by that number leave no remainder. Multiples are also products. e.g 1 x 4 = 4 2 x 4 = 8 M_4 = {4, 8, 12……}		Pupils should be able to: - Find Multiples of numbers. - Complete multiple tables correctly	Finding multiples of numbers. Completing tables. NB. 0 is a multiple of all numbers of all numbers but is ignored in the lists.	Textbooks Chalkboard A drawn multiples chart			

	7 & 8		Multiples. - common multiples. e.g M_2 = {2,4,6,8…….} M_4 = {4,8,12,16,……} Common multiples of 2 & 4 are: {4,8,12,……..} Lowest common multiples. e.g L.C.M of 2 & 4 = 4		Pupils should be able to: - Find common multiples of given numbers. - Find the L.C.M of given numbers.	Listing multiples Identifying common multiples & L. C. M of numbers.	Text books chalkboard			

TRANSITION MATHEMATICS SCHEME P.4 TERM II 2024

Wk	Pd	Theme	Subtopic/ Content	Life Skills	Competences	Activities	Learning Materials	Method	Resource	R
1	**HOLIDAY WORK REVISION**									
	1 & 2	**NUMBER FACTS AND SEQUENCES**	**NUMBER PATTERNS AND SRQUENCES** (i)Building sequences with even, odd or prime numbers (ii)Counting in tens, hundreds	Logical thinking Problem solving Critical thinking	Pupils should be able to: (i)Complete number sequences correctly (ii)Count in tens, hundreds, thousands (iii)Compute numbers using factor 10	-Completing number sequences -Computing numbers using the factor 10 concept MK bk 4 pg 73 exe. 4f 1 – 10; pg 68 4m 1 – 6.	Text book	Discussion Exposition Discovery Demonstration	MK 2000 Bk 4 Pp 56-73 Understanding Mtc Bk4 Pp83-88	
	3 & 4	NUMBER FACTS AND SEQUENCES	**FACTORS** -a number which divides into another exactly e.g 1x6=6 2x3=6 F_6=(1,2,3,6) -Using Factor chats	Logical thinking Problem solving Critical thinking	Pupils should be able to: (i)Define a factor (ii)Find factors of numbers (iii)Complete the factor charts correctly	i)Finding factors of number ii)Listing factors iii)Completing factor charts MK bk 4 pg 73 exe. 4s A 1 – 10; pg 74 4t 1 – 6.	Textbooks Factor Charts	Discussion Discovery Exposition	MK 2000 Bk 4 Pp 69-74 Understanding Mtc Bk4 Pp94-96	

	5 & 6		**MULTIPLES** -Numbers which leave no remainder when divided by the given number e.g. 4 1X4=4 2X4=8 Therefore M_4={4,8,12… <u>Common multiples</u> e.g. M_2={2,4,6,8} M_4={2,4,8…} Therefore the lowest common multiple of 2 and 4 is 4	Logical thinking Problem solving Critical thinking	Pupils should be able to: Find multiples of numbers Complete tables on multiples Find common multiples of given numbers Identify the LCM of given numbers	Finding multiples, common multiples and LCM of numbers. MK bk 4 pg 75 exe. 4u 1 – 6. Und. Mtc bk 4 pg 103 exe.5.17; no.2,1 – 6.	Textbooks Chalkboard	Discussion Discovery Exposition		
	7 & 8		**TYPES OF FRACTIONS** Common fractions. Proper fractions. Improper fractions. Mixed numbers. Changing mixed numbers into improper fractions.	Logical thinking	Pupils should be able to: i) Identify numerators ii)denominators in common fractions. Give examples of proper and improper fractions. Change mixed numbers into improper fractions.	i) identifying different fractions. ii) giving examples of different fractions. iii) changing fractions from one form to another. iv) illustrating fractions on diagrams. Mk Pri Mtc Bk 4 pg 91 ex. 5j no. 1- 10	Fractions on a chart +	Discussion Demonstration Exposition	MK 2000 Bk 4 Pp 69-74 Understanding Mtc Bk4 Pp94-96	

2	**1 & 2**	**FRACTIONS**	Changing improper fractions to mixed numbers.	Logical thinking Problem so Critical thinking	Pupils should be able to: i) change improper fractions into mixed numbers.	Converting improper fractions into mixed numbers. Und Mtc pg 60 ex. 4.5 no. 1 & 2 a,b,c,d	Textbooks	Stimulation Exposition Discussion	Understanding Mtc Bk4 Pp60 MK 2000 Bk4 Pp 85	
	3 & 4	**FRACTIONS**	**EQUIVALENT FRACTIONS** -using the charts. -Using the number line. -Multiplying numerator and denominator by the same whole number which is greater than 1.	Problem solving	Pupils should be able to: Use the charts to find equivalent fractions. Use the number line to find equivalent fractions. Multiply fractions by whole numbers to get the equivalent fractions.	Finding equivalent fractions using charts, number lines and multiplication. Representing as equivalent fractions on a number line.	Textbooks Drawn Number Lines on the ground	Discussion Exposition Demonstration	Understanding Mtc Bk4 Pp60-66 MK 2000 Bk4 Pp 80	
	5 & 6	**FRACTIONS**	**EQUIVALENT FRACTIONS** using the charts. Using the number line. Multiplying numerator and denominator by the same whole number which is greater than 1.	Logical thinking Problem solving Critical thinking	Pupils should be able to: Use the charts to find equivalent fractions. Use the number line to find equivalent fractions. Multiply fractions by whole numbers to get the equivalent fractions.	Finding equivalent fractions using charts, number lines and multiplication. Acting as equivalent fractions on a number line		Exposition Demonstration Discussion Practical Work	Understanding Mtc Bk4 Pp60-66 MK 2000 Bk4 Pp 80	
	7 & 8	**FRACTIONS**	**REDUCING FRACTIONS TO THEIR LOWEST TERMS.** **e.g.**	Critical thinking	Pupils should be able to: Reduce given fractions into their lowest terms	Reducing fractions. MK bk 4 pg 84exe. 5d 1 – 10;	Textbooks Chalkboard	Discussion	MK 2000 Bk4 Pp 87	

	1 & 2		**COMPARISON OF FRACTIONS.** Using LCM to find values first then compare. Ascending and descending order.	Critical thinking	Compare fractions using less than, greater than or equal. Arrange fractions in order.	Comparing fractions. Und. Mtc 4 pg 67 ex.4.10 1 & 2 Ordering fractions. MK bk 4 pg 86 exe. 5f ; 11, 12,15, 16.	Textbooks Chalkboard	Discussion Exposition Exposition		
3	**3 & 4**	**FRACTIONS**	ADDITION AND SUBTRACTION OF FRACTIONS WITH SAME DENOMINATORS	Critical thinking	Pupils should be able to: i)Add fractions ii)subtract fractions with same denominators iii)reduce the solutions to the lowest terms	Adding and subtracting fractions. Reducing fractions to lowest terms. MK bk 4 pg 87exe. 5g 1 – 10; pg 89 ex.5i; 1 – 4, 17, 18 19,20.	Textbooks Chalkboard	Exposition Discussion	MK 2000 Bk4 Pp 87 -89 Understanding Mtc Bk4 Pp68-69	
4	**5 & 6**		**ADDING FRACTIONS WITH DIFFERENT DENOMINATORS.** USING EQUIVALENT FRACTIONS.	Critical thinking	Add fractions with different denominators using equivalent fractions.	Adding fractions with different denominators. Und. Mtc Bk4 pg 68 ex. 4.11 No. 1 & 2 a,b,c,d	Textbooks Chalkboard	Exposition Discussion	MK 2000 Bk4 Pp 87 -89 Understanding Mtc Bk4	

	7 & 8	**FRACTIONS**	**SUBTRACTIN G FRACTIONS WITH DIFFERENT DENOMINATORS** USING EQUIVALENT FRACTIONS.	Problem solving Critical thinking	Pupils should be able to: subtract fractions with different denominators using equivalent fractions.	Subtracting fractions with different denominators. Und. Mtc Bk4 pg 69 ex. 4.12 No. 1 & 2 a,b,c,d	Textbooks Chalkboard	Exposition Discussion	MK 2000 Bk4 Pp 87 Und. Mtc Bk4 pg 69	
	1 & 2		**ADDITION OF MIXED NUMBERS**	Logical thinking	Pupils should be able to: Add mixed numbers correctly.	Adding mixed fractions. MK bk 4 pg 93exe. 5l 1 – 8 pg 89 ex.5i; 1 – 4,	Textbooks Chalkboard		Understanding Mtc Bk4 Pp 70	
	3 & 4		**SUBTRACTION OF MIXED NUMBERS**		Subtract mixed numbers.	Subtracting mixed numbers. MK bk 4 pg 93 exe. 5m 1 – 10		Exposition Discussio n		
	5 & 6		**MULTIPLICATION OF FRACTIONS BY WHOLE NUMBERS** ½ of 300 ½ x 300 = 300/2 = 150	Problem solving Critical thinking	Pupils should be able to: Multiply fractions by whole numbers.	Multiplying fractions by whole numbers. MK bk 4 pg 93exe. 5l 1 – 8 pg 97 ex.5q	Textbooks Chalkboard Books Pens Pencils	Exposition Demonstration Discussion Practical Work	MK 2000 Bk4 Pp 95 – 97	

5	**7 & 8**		**DECIMAL FRACTIONS** Changing decimals to fractions. e.g. 0.1 = 1/10 2.3 = 2 + 3/10 =	Logical thinking. Problem solving	Pupils should be able to: Rewrite decimal fractions as common fractions.	Changing decimal fractions into common fractions. Und. Mtc pg 73 ex. 4.16.	Textbooks Chalkboard	Exposition Discussion	Understanding Mtc Bk4 Pp72 - 74	
	1 & 2		**Changing fractions to decimals**		Pupils should be able to: Change common fractions into decimals. Change mixed numbers into decimal fractions.	Changing common fractions into decimals. Und. Mtc pg 73 ex. 4.15; 1a, 2,3b, c. Changing mixed fractions into decimals. Und. Mtc pg 73 ex. 4.15; 1a, 2,3b, c.	Textbooks Chalkboard	Discussion Demonstration Exposition Exposition	Understanding Mtc Bk4 Pp73	
	3 & 4		APPLICATION OF FRACTIONS Application of fractions. Example: **In a class of 42 pupils, one third of them are boys. How many girls are in that class?** 1/3 of 42 =1/3 x 42 =14 boys. Girls are 42 – 14 = 28.	Logical thinking Problem solving	Pupils should be able to: Solve word problems in fractions.	Working out word problems involving fractions.	Textbooks Chalkboard	Exposition Discussion	MK 2000 Bk4 Pp 88, 90, 111, 114.	

6	5 & 6	ALGEBRA	<u>EQUATIONS.</u> *Using letters in place of boxes.* a) <u>Addition</u> a + 6 = 9 Subtract 6 from each side a + 6 – 6=9-6 a + o = 3 ∴a = 3 Ans. Prove. A = 6 =9 Substitute 3 + 6 = 9 9 = 9.	Logical thinking Problem solving king	Pupils should be able to:- i) Work out simple sums involving addition in algebra. ii) Substitute the calculated value in the given equation to prove their answers	) Working out the unknowns. ii) Proving the solutions got. Und. Mtc bk 4pg 216 ex. 15.6; 1a – f.	Textbooks	Exposition Discussion	Understanding Mat Pp 215- 216	

6	**7 & 8**	ALGEBRA	b) Subtraction. (i) x- 28 =21 Add 28 to each side x- 28 +28= 21 + 28. x- o = 21 +28 ∴ x = 49Ans. Prove: x- 28 = 21 Substitute 49 – 28=21 21 = 21 ii) 20 – V = 4 <u>Re-arrange</u> 20 – 4 = V 16= V ∴V = 16Ans Prove: 20 – V = 4 Substitute 20 – 16 = 4 4 = 4.	Logical thinking Problem solving	Pupils should be able to:- i) Work out simple sums involving subtraction algebra. ii) Substitute the calculated value in the given equation to prove their answers	i) Working out the unknowns. ii) Proving the solutions got. Mk Mtc bk 4 pg 247 ex. 16 e	Textbooks	Exposition Discussion	Mk Mtc bk 4 pg 247	

7	**1 & 2**	ALGEBRA	Multiplication i) 2 x a = 2a, ii) 3 × q = 12. 3q = 12 ÷ 3 q = 4 Ans.	Logical thinking Problem solving	Pupils should be able to:- i) Work out simple sums involving multiplication algebra. ii) Substitute the calculated value in the given equation to prove their answers	Re framing the equations -Solving the equations -Proving the solutions Mk Mtc bk 4 pg 255 ex. 16 q	Textbooks	Exposition Discussion	Mk Mtc bk 4 pg 255	
7	**3 & 4**	ALGEBRA	Division b ÷ 3 = 5 b ÷ 3 × 3 = 5 × 3 b = 15 Ans.	Logical thinking	Pupils should be able to: i) Reframe the equations in words. ii) Work out division equations correctly. iii) Prove the solutions got.	Re framing the equations -Solving the equations -Proving the solutions MK. Pri. Mtc BK 4 pp 254 ex. 16 p.	Textbooks Charts	Exposition Discussion	MK. Pri. Mtc BK 4 pp 254	
7	5 & 6	*ALGEBRA*	Forming equations Mary has some goats. When she sells 5 goats she remains with 9 goats. How many did she have? Let the number of goats be g. Equation g – 5 = 9 g- 5 + 5 = (9 + 5) goats g – 0 = 14 goats g = 14 goats. ∴She had 14 goats.	Logical thinking Problem solving thinking	Pupils should be able to:- i) Solve numbers in word problems. ii) Form equations from the given sentences iii) Solve the equations formed.	i) Reading the word problems. ii) Forming equations. iii) Solving equations.	Text books Charts	Exposition	Mk pri Mtc BK 4 Pg 257 - 260	

7	7 & 8		Substitution Replacing given letters with directed numbers. If g = 4. Find 3g. 3g = 3 x 4 =12 Ans. If a = 2, b = 3, c = 4. Find a + b – c = 2 + 3 – 4 = 5 – 4 = 1	Logical thin Problem solving king	i) Substitute numbers correctly. i) Find solution to the given numbers(problems)	) Substituting numbers ii) Working out solutions. Mk pri. Mtc bk 4 pg 253 ex. 16 , 16m, 16 n. Pg 254 ex. 16 0, 16 p.	Text books		MK Pr. Mtc BK 4 pp 253 – 254.	
8	1 & 2	*ALGEBRA*	**Like terms.** i) Using real, same objects. ii) **Using letters** g + g + g = 3g. *Unlike terms* i) Using real but different objects **ii) Collecting like terms and simplifying them.** i) K + 5L + 2K K+ 2K + 5L = 3K + 5L. ii) 3w + 2e – w 3w – w + 2e = 2w + 2e. iii) 9J + 3k – j – 2k 9j – j + 3k – 2k 8j + k Ans.	Logical thinking Problem solving thinking	Pupils should be able to:- i) Add and subtract real objects as like terms. ii) Add and subtract letters as like terms. iii) Collect real objects according to same appearance. iv) Collect like terms from the different letters then simplify them.	-Adding and subtracting real objects -Adding and subtracting like terms -Collecting like terms. -Simplifying given problems. Mk pri. Mtc bk 4 pg 250 ex 16i	Oranges Passion fruits Pens, pencils Pieces of chalk Leaves Textbooks	Demonstration Exposition Discussion	Und Mtc Pp 211 – 214 MK BK 4	

8	**3 & 4**	**GEOMETRY**	CURVES Open curves		Pupils should be able to: Identify the different curves	Drawing curves	Textbooks Chalkboard	Exposition Demonstration Discussion Practical work	MK 2000 Bk 4 (old) pp 135-136.	
	5 & 6		Closed curves Simple closed curves. Circles		Pupils should be able to: Identify the different curves	Drawing curves	Textbooks Chalkboard	Exposition Demonstration Discussion Practical work		
	7 & 8		Parts of a circle. Diameter Radius Chord Circumference		Draw circles using their feet and define circumference Draw circles using pairs of compasses	Constructing circles. Doing exercises on curves and circles.	Textbooks Chalkboard	Exposition Demonstration Discussion Practical work		

9	**1 & 2**		Semicircle Quadrant. Drawing circles using feet. Using pairs of compasses Measuring radii of circles.	Problem solving	Measure the radii of given circles then construct circles using given radii. Mention the relationship between the radius and diameter of a circle	Constructing circles. Doing exercises on curves and circles.	Textbooks Chalkboard	Exposition Demonstration Discussion Practical work	MK 2000 Bk 4 (old) pp 135-136	

9	**3 & 4**	GEOMETRY	POLYGONS Poly –many gons –sides. Polygon is a flat closed shape with many straight, closed sides and angles. Triangles Have three sides and angles. *Equilateral, isosceles, scalene, right angled triangles.* **Quadrilaterals**. Have four sides and angles. Square, rectangle, kite, rhombus, trapezium, parallelogram.	Logical thinking. Problem solving	Name types of polygons correctly as Regular and Irregular polygons. Define each polygon. Draw each polygon and name. Define a regular polygon.	Defining polygons. Drawing and naming polygons	Textbooks Chalkboard	Exposition Demonstration Discussion Practical work.	Mk 2000 Bk 4 pp136 Understanding Maths bk 4 113	
	5 & 6		**POLYGONS** *Pentagon – 5 sides* Hexagon – 6 sides Septagon – 7 sides Octagon – 8 sides. Nonagon – 9 sides Decagon – 10 sides. Polygons with all equal sides are called regular polygons.	Logical thinking	Pupils should be able to: Define each polygon. Draw each polygon name the polygons. Define a regular polygon.	Defining polygons. Drawing and naming polygons.	Textbooks Rulers Samples of polygons cut from manila paper Chalkboard	Exposition Demonstration Discussion	Mk 2000 Bk 4 pp136 Understanding Maths bk 4 113	

	7 & 8	**GEOMETRY**	**LINES OF SYMMETRY** Symmetry is the exact match in shape and size between two parts. e.g. a square has 4 lines of symmetry	Logical thinking. Problem solving	Pupils should be able to: Identify the lines of symmetry in given shapes. Fold papers practically to discover the lines of symmetry for given shapes.	Folding papers Discussing different findings. Doing written exercises.	Manila papers shaped in various polygons Textbooks Chalkboard.	Exposition Discussion Demonstration	MK 2000 BK4 Pp 134	
10	**1 & 2**		**SOLID FIGURES** Drawing and naming. **Examples** water tank - a cylinder. Funnel – a cone	Logical thinking. Problem solving	Pupils should be able to: Draw and name solid figures. Give examples of objects with different geometrical shapes.	Drawing and naming figures. Giving examples of solid figures in real life situations.	Boxes, funnels, dice, a football and other examples of solid figures. Text books Chalkboard.	Demonstration Exposition		
	3 & 4	**GEOMETRY**	**Edges, faces and Vertices.**	Logical thinking. Problem solving	Identify the edges, vertices and faces of the different solid figures. Find out the number of faces, vertices and edges each has.	Identifying the different parts of the solid figures and finding out how many there are in each.	Boxes, funnels, dice, a football and other examples of solid figures. Text books Chalkboard.	Demonstration Observation Discussion	MK 2000 Bk 4 Pp 209-210 Understanding Mtc Bk 4 116	

	5 & 6	**GEOMETRY**	LINES AND ANGLES. Line Line segment Ray Parallel lines Intersecting lines Perpendicular lines Naming lines and angles.	Logical thinking Problem solving Critical thinking	Pupils should be able to: Define lines. Draw different lines. Name the different lines. Identify angles name angles. Draw the identified angles.	Drawing and naming lines and angles.	Rulers Pencils Textbooks Chalkboard		MK 2000 BK4 Pp200-203 Understanding Mtc Bk4 Pp162-164	
	7 & 8	**GEOMETRY**	**TYPES OF ANGLES** A right angle Acute angle Obtuse angle A straight angle A reflex angle Complementary angles. Supplementary angles	Logical thinking. Problem solving.	Pupils should be able to: Define the different types of angles. Use their arms and legs to show the right, acute, obtuse and straight angles. Draw and name the different kinds of angles.	Defining angles Demonstrating angles using Parts of their bodies. Drawing and naming angles.	Rulers Pencils Textbooks chalkboard	Exposition Demonstration Discussion	MK 2000 BK4 Pp 137	

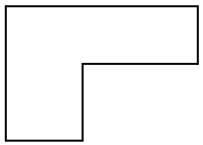
11	**1 & 2**	**GEOMETRY**	**DRAWING AND MEASURING ANGLES USING A PROTRATOR**	Logical thinking Problem solving Critical thinking	Pupils should be able to: i) Use a protractor to measure angles correctly. ii) Draw angles correctly.	Measuring and drawing angles.	Rulers Pencils Textbooks Protractors Chalkboard	Exposition Discussion Practical Work, Discovery Demonstration	MK 2000 Bk 4 Pp 138, 140-142	
	3 & 4	**GEOMETRY**	**FINDING UNKNOWN ANGLES** a) complementary angles	Critical thinking Effective communication	Pupils should be able to: Work out the missing angles.	Working out the missing angles.	Textbooks Chalkboard	Exposition Discussion	MK 2000 Bk 4 Pp 139, 142 Ex. 7n	
	5 & 6	**GEOMETRY**	**FINDING UNKNOWN ANGLES** a) supplementary angles	Logical thinking Problem solving Critical thinking	Pupils should be able to: Work out the missing angles.	Working out the missing angles.	Textbooks Chalkboard	Exposition Discussion Demonstration	MK 2000 Bk 4 pp 139, 142	

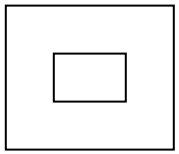
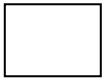
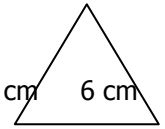
11	**7 & 8**		**AREA OF RECTANGLES AND SQUARES**	Logical thinking Problem solving Critical thinking	Pupils should be able to: Work out the missing angles.	Working out the missing angles.	Textbooks Chalkboard Pencils Books Pieces of cha lk	Exposition Discussion Demonstration	MK 2000 Bk 4 Pp 208	
12	**1 & 2**	**GEOMETRY**	**APPLICATION OF PERIMETER/AREA**	Logical thinking Problem solving Critical thinking	Pupils should be able to: Interpret the given statements.	Solving the given problems.	Textbooks Chalkboard	Exposition Discussion Exposition Discovery	MK 2000 Bk 4 Pp 209-210	

P.4 Transition Mathematics Scheme Term III

Wk	Pd	Theme	Sub Topic & Content	Life Skills	Competences	Activities	L/Materials	Method	Ref	Rem
	BEGINNING OF TERM EXAM AND REVISION HOLIDAY WORK									
2	1 & 2	MEASURES	Length i) Measuring and recording lengths of objects. ii) Estimating lengths of objects. iii) Measuring line segments. iv) Conversions. Metres into cm	Logical thinking, Problem solving Critical thinking	Pupils should be able to:- i) Estimate lengths ii) Measure length accurately. iii) Convert metres to centimetres. iv) Convert centimetres to metres.	Estimating lengths Measuring length Converting metres to centimetres. Converting centimetres to metres.	Metre rulers I dm lengths, foot rulers Text books.	Practical work Demonstration Discussion	MK. Pri. MtcBK 5 pp 250 MK Pri. MtcPp 138-140. Understanding Mtc Bk 4 pp155.	
2	3 & 4		LENGTH i) Converting Km into metres.		Pupils should be able to:- i) Convert long distance units i.e. Km and M. correctly.	Converting units of length. -Computing the equivalence tables.	Text books	Demonstration Discussion Observation	MK Pri. MtcPp 186 - 192 Understanding Mtc Bk 4 pp155.	

2	5 & 6		**Length:** i Adding units of length. **Example:** 130 cm +20 cm = 150cm. ii) Multiplying units of length. **Example:** 4 m 40 cm x 2 = 8m 80 cm. iii) Application of addition and multiplication of length units.	Pupils should be able to: i) Add m and cm. ii) Add Km and m. iii) Multiply -m and cm iv) Multiply Km and m. iii) Solve word problems in addition and multiplication of units of length.	-Adding units of length. Multiplying numbers Solving word problems in length.	Text books	Demonstration Discussion Observation	MK Pri. Mtc Pp 187-188, 190, 197 – 199. Understanding Mtc Bk 4 pp155.	
	7 & 8	MEASURES	**Length.** i) Subtracting m and cm. **Example:** 38m 5cm – 2m 20cm = 36m 30 cm. ii) Dividing m and cm. **Example:** 5m 20 cm ÷ 5 = 1m 04cm Km and m. **Example:** 7 Km 700m ÷ 7 = 1 Km 100m.	Pupils should be able to:- i) Subtract units of length carefully. Divide units of length	-Subtracting units of length. -Dividing units of length.	Text books	Demonstration Discussion	MK Pri. Mtc Pp 187-188, 197 – 199.	

3	1 & 2	MEASURES	**Perimeter.** i) Perimeter of common polygons -triangles, quadrilaterals, pentagons hexagons. Use p= (s + s + s) According to the number of sides. ii) Finding sides of squares / rectangles when perimeter is given. Perimeter = 24 m Find each side of the square. P = 4s. 24 = 4s. 24 ÷ 4 = 4s ÷ 4. 4 cm = s s = 4 cm. ∴ each side is 4 cm.	Pupils should be able to: i) Work out perimeter of simple polygons. ii) Apply algebra to solve some complex problems involving perimeter of squares and rectangles. iii) Interpret word problems in form of sketch drawings	Working out perimeter of polygons. -Finding missing lengths in squares and rectangles, given perimeter. -Sketching squares and rectangles.	Text books	Demonstration Discussion Discovery	MK Pri. Mtc Pp 206-208	
	7 & 8	MEASURES	**Area** i) Areas of rectangles and squares. A = L X L Example II 	Pupils should be able to:- i) Work out area of squares ii) Work out area of rectangles. iii) Identify different squares or rectangles in one shape, by their dimensions. iv) Work out area of complex squares. v) Work out area of complex rectangles.	-Working out area of rectangles and squares. -Discovering rectangles and squares by the dimensions -Putting together different areas thus finding total area of complex squares and rectangles.	Tex books Manila cards cut into 1 cm^2, Cards with different lengths & widths to justify 'area'.	Guided Discovery Discussion Demonstration	MK Pri. Mtc Bk 4 Pp 210 – 213 (Revised Edition) (Old Edition) Pp 206 – 208 Peak Mathematics (six) Pp 10.	
4	3 &	MEASURES	**Area.** Area of shaded and un	Pupils should be able to:- i) Work out the area of the	-Working out areas of squares and		Demonstration.	MK Pri. Mtc. Bk	

	4		shaded parts in squares or rectangles. 	whole shape and the shaded shape separately. ii) Subtract area to get the required portion iii) Solve application problems related to area.	rectangles -Subtracting areas -Solving application problems involving area of squares and rectangles.	Text books	Discussion	5 Pp 212 – 213 Peak Mtc Six Pp 10 – 11, 47 Pp 209.	
4	5 & 6	MEASURES	 Area of sq = L X W. = 6 X 6 cm^2 = 36 cm^2 area of shaded part = ½ of 36 cm^2 = 36 ÷ 2 = 16 cm^2 Area of triangles iii) Application of area of triangles.  4 cm 6 cm 8 cm area = ½ x b x h. = ½ x 8 x 6 cm^2 = 48 ÷ 2 cm^2 = 24 cm^2	Pupils should be able to:- i) Identify triangles from rectangles and squares. ii) Work out areas of triangles using formula. iii) Identify perpendicular heights of given iV) Solve problems involving area of triangles.	i) Identifying triangles from squares and rectangles. ii) Identifying perpendicular heights of triangles iii) Solving area problems in triangles.	Manila cards bearing shapes of rectangles and squares Text books	Discussion Demonstration Guided Discovery	Peak Mtc (six) Pp 46 MK Pri. Mtc Bk 4 (Revised) Pp 214 – 218 (Old) Pp 211 – 214 MK Pri. Mtc BK 5 Pp 210 Ex. 8 No 1,2,4,5, 8.	

4	7 & 8	MEASURES	**Volume.** Volume = the space occupied by cubes practical work. i) Using cubes packed in cuboid and bigger cubes, to internalise 'volume' ii) Using formula V= Length x Width x height V= LxWxH. V= LxWXH. V=(2x3x4)cm^3 V=24cm^3 Ans. CM^3 read as cubic cm.	Pupils should be able to: i) Practically pack cubes to discover volumes of given solids. ii) Use formula to work out volume of cubes and cuboids. iii) Read units of volume correctly. (Cubic units)	Packing cubes. Working out volumes of solids using formula.	Small cubes Bigger cubes. Cuboids Textbooks	Practical work. Discovery Discussion Observation	ST(P)Mtc !APp 279 – 280 MK Pri. Mtc BK Pp 218 – 221.	
5	1 & 2	MEASURES	MONEY i) **Revision of P.3 Work.** **Conversions** Changing paper money into their equivalencies in coins. Adding money. **Example:** 150 shillings + 100 shillings = 250 shillings. Subtracting money. **Example:** 7000 shillings – 2050 shillings = 4950 shillings.	Pupils should be able to: i) Convert money correctly. ii) Add money. ii) subtract money. Interpret word problems involving money and solve them accordingly.	Converting money from coins to paper money equivalents and vice – versa. -Adding money. Subtracting money. -solving word problems involving money	Money in coins and paper form. Text books	Discussion Demonstration Problem solving	MK Pri. Mtc BK 4 (Revised)Pp 148 – 150	

5	1 & 2	MEASURES	BUYING AND SELLING **Finding the cost of one item when the cost of one is given.** i) e.g. 1 tin of butter costs 500/= find the cost of 3 tins. 1 tin costs 500/= (3 tins cost more). 500 x 3 1500/= ∴3 tins cost 1500/= ii) Finding the cost of one item when the cost of many is given. e.g. 3 sweets cost 450/= find the cost of 1 sweet. 3 sweets cost 450/= (1 sweet costs less)	Pupils should be able to:- i) Find the costs of the required items accordingly. ii) State when a cost should be more or less than the given one.	Multiplying money. -Dividing money.	Text books Shopping items like empty tins of biscuits, soap boxes toothpaste boxes, to make a shop corner Price tags on manila papers.	Demonstration Discussion Observation	MK Pri. Maths BK 4 (Revised) Pp 152 – 152.	
5	3 & 4	MEASURES	MONEY Simple shopping bills. e.g. Jane bought 2 kg of sugar, 4 packets of salt etc With provided price list.	Pupils should be able to:- Prepare shopping lists. Work out simple expenditures. Work out balances of money after expenditures.	Drawing tables for shopping lists. -Preparing shopping lists. -Adding money -Subtracting money	Text books	Discussion Demonstration	MK Pri. Mtc BK 4 (Revised) Pp 133 – 134.	

5	5 & 6	MEASURES	MONEY I**) more about shopping bills.** **Example:** Juma bought 5 books at 7000/=, 5 pens at 1500/= and 4 cups at 2000/=. Find out the total cost of all the items.	Pupils should be able to:- i) work out shopping bills correctly. ii) Define profit. iii) Work out profits of given sums. iv) Find the buying price B.P selling price of items when the selling price, or buying price and profit are given Buying price = SP – profit S.P = B.P + Profit.	Working with shopping bills. Discussing profit Working out profits.	Text books	Discussion Demonstration	MK Pri.Mtc BK 4 Pp 155(Revised) Pp 156. MK Mtc BK 4 Pp 157 – 159.	
5	7 & 8	MEASURES	**MONEY** **LOSS** Definition Loss = reduction/less Loss=Buying price – selling price. e.g Bought at 15000/= sold at 10,000/= Loss when S.P is less than B.P Loss= B.P – S.P.	Pupils should be able to:- i) Define loss ii) Work out B.P. in different sums. iii) Find buying /cost prices when the selling and losses are given. Find selling prices when cost / buying prices and losses are given.	-Working out loss problems. -Discussing loss problems.	Textbooks	Discussion Demonstration	MK. Pri. MtcBK 4 Pp 157.	

6	3 & 4	MEASURES	TIME Conversions. i) Changing minutes to seconds. 1 min = 60 sec. 10min =(60 x 10) sec. =600 sec Ans. ii) Changing hours to minutes. 1hr = 60 min. 3hrs = (60x3)min =180min. iii)1 hour = 60 min 1½ hrs = 3/2 x60 iv) Changing Min to hrs. 60min=1hr 90min = 90/60 hrs = 1 ½ hrs.	Pupils should be able to:- i) Convert seconds to minutes. ii) Convert minutes to seconds. iii) Convert hours to minutes. iii) Convert minutes to hours.	Changing units of time from one to the other.	Text books.	Discussion demonstration	MK. Pri.Mtc BK 4 (Old)Pp 167 – 168(Revised) Pp 162-164. Understanding Mtc BK 4 Pp 141.	
6	5 & 6	MEASURES	**TIME** **Application of time.** e.g. A bus takes 4½ hours to arrive at K'la. What time does it take in minutes? 1 hour = 60 min. 4 ½ hrs= 9/2 x 60 min. = 540 ÷ 2min = 270 min.	Pupils should be able to:- i) apply the concept of multiplication of time.	Solving word problems in time. -Adding time. -Multiplying time. -Solving problem involving time.	Text books	Discussion	MK BK 4 (Revised)Pp 164 &17	

7	1 & 2	MEASURES	**TIME** **TIME DURATION.** Time duration = length of time **Example** A girl started walking from home at 7.15am. She reached sch. At 8.15am. How long did it take her? 8.15 – 7.15 = 1 .00 It took her 1 hour to reach.	Pupils should be able to:- i) Work out time duration.	Working out time duration	Text books Calendar.	Discussion Demonstration Observation Guided discovery	Mk Pri. Mtc BK 4Pp 17	
7	3 & 4		**Hours, days and weeks.** i) **Conversions.** Examples: 1 day = 24 hours 4 days = 24 x 4 hours = 96 hours. 24 hours = 1 day. 48 hours = 48 ÷ 24 = 2hrs. 1 week = 7 days. 5 weeks = 7 x 5 days. = 35 days. 7 days =1 week. 21 days =21 ÷ 7 weeks = 3 weeks.	ii) Convert hours into days. ii) Convert days into hours. iii) Convert days into weeks. iii) Convert weeks into days.	Converting days into hours. Hours into days. Days into weeks. Weeks into days.	Text books Calendar.	Discussion demonstration	Mk Pri. Mtc BK 4Pp 179	

8	1 & 2	MEASURES	CAPACITY i) Using the equivalence table. ii) Converting L into Ml and vice – versa. **Example** 1litre = 1000 ml 5 litres = 1000 x 5 ml = 5000 ml. 1000 ml = 1 litre. 7000 ml = 7000 ÷ 1000 = 7 litres. iii) Addition of L and Ml. **Example** 4 ½ litres + 2 ½ litres = 6 + 1 litres = 7 litres. iii) Multiplication of L and Ml. **Example** 3 litres 400 ml x 2 = 6 litres 800 ml.	Pupils should be able to:- i) Build up the table of equivalence in capacity. ii) Convert units of capacity from one to the other. iii) Add units of capacity. iv) Multiply units of capacity.	-Filling in equivalence tables. -Converting units from one to the other. Working out capacity problems in addition and multiplication.	Text books	demonstration Discussion	MK Pri. Mtc BK 4 Pp 226 – 227.	
8	7 & 8	MEASURES	i) Subtraction of L and Ml. 7litres 97ml – 3litres 5ml = 4 litres 92 ml Word problems in capacity.	Subtract units of capacity. Solve word problems in capacity. Workout problems involving capacity.	Working out capacity problems in addition, subtraction, and multiplication.	Text books	demonstration Discussion	MK Pri. Mtc BK 4 Pp 224 – 227.	

9	1 & 2	MEASURES	**MASS** Estimates i) Practical measuring of objects. Basic unit – a gram ii) **Conversions.** Kg to g and vice – versa. 1kg = 1000 g 5 kg = 1000 x 5 g = 5000 g 1000g = 1kg 500 g = 500 ÷ 1000 g = ½ kg	Pupils should be able to:- i) Make estimates of masses ii) Accurately measure masses iii) Convert units of mass from one to the other.	-Making estimates -Measuring mass -Converting units of mass.	Weighing scale Beans Sand Sugar books	Practical work. Group work Discussion Demonstration	MK Pri. Maths BK 4 Pp 228 – 231	
9	5 & 6	MEASURES	i) Subtraction and division of kg and grams. i) Application of subtraction and division of kg and g.	Pupils should be able to:- i) Subtract units of mass. ii) divide units of mass iii) Solve word problems involving subtraction and division of mass.	Subtracting and dividing units of mass. Solving word problems.	Textbooks	Demonstration Discussion.	MK Pri. Mtc BK 4 Pp 233 - 234	
9	7 & 8	GRAPHS AND INTERPRETATION OF INFORMATION	**GRAPHS** -Meaning of graphs. -Types of graphs. -Meaning of pictographs -Features of pictograph. -Read and interpret the given pictograph.	Pupils should be able to: -Define graphs. -Mention the types of graphs -Give the meaning of pictographs. -Give the features of a pictographs. -Read and interpret the given pictograph.	-Drawing graphs. -Using scale to solve problems.	Drawn graphs on chats. Textbooks	Observation Guided discovery Discussion	MK Pri Mtc BK4 page 115-117 Understanding Pri Mtc Pp 120	
10	1 &			Pupils should be able to:	Drawing	Drawn	Observation	MK Pri Mtc BK4 page	

	2		**Pictographs** Drawing pictographs.	-Read and interpret the given information. -Draw pictograph from the given information.	pictographs. Drawing scale. Solving graph problems.	graphs on chats. Text books	Guided discovery Discussion	115-117 Understanding Pri Mtc Pp 120	
10	3 & 4		**Bar graphs** Reading and interpreting bar graphs.	Pupils should be able to: -Read and interpret the given information. -Answer questions about the graph correctly.	Drawing graphs. Solving graph problems.	Drawn graphs. Textbooks.	Observation Guided discovery Discussion	MK Pri Mtc BK4 page 118-123 Understanding Pri Mtc Pp 122	
10	5 & 6		Drawing bar graphs.	Pupils should be able to: -Read and interpret the given information. -Draw bar graphs for the given information.	Drawing graphs. Solving graph problems.		Observation Guided discovery Discussion	MK Pri Mtc BK4 page 118-123 Understanding Pri Mtc Pp 122	

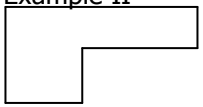
P.4 Transition Mathematics Scheme Term III

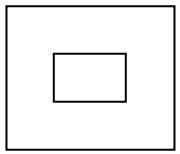
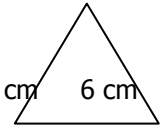
Wk	Pd	Theme	Topic	Sub - topic	Competence		Content	Methods	Activities	Life skills	Materials	Ref	Rem
					Subject	language							
REVISION HOLIDAY WORK													
2	1 & 2	MEASURES	LENGHT, MASS, CAPACITY	LENGHT	The learner uses standard measuring instrument to measure length in M, CM, MM Mass in Kg and g, capacity in litres and Millitres	i. Expresses measurement of length, mass & capacity in English of different items ii. Makes a table of different units of length, mass & capacity/ volume & shows their abbreviation	i) Measuring and recording lengths of objects. ii) Estimating lengths of objects. iii) Measuring line segments. iv) Conversions. Metres into cm	Practical work Demonstration Discussion	Estimating lengths Measuring length Converting metres to centimetres. Converting centimetres to metres.	Logical thinking, Problem solving Critical thinking		MK. Pri. MtcBK 5 pp 250. MK Pri. MtcPp 138-140. Understanding Mtc Bk 4 pp155.	

	3 & 4			LENGTH	Converts Km into metres.	i. Expresses measurement of length, mass & capacity in English of different items ii. Makes a table of different units of length, mass & capacity/ volume & shows their abbreviation	i) Measuring and recording lengths of objects. ii) Estimating lengths of objects. iii) Measuring line segments. iv) Conversions. Metres into cm	Practical work Demonstration Discussion	Converting units of length. -Computing the equivalence tables.		Text books	MK Pri. MtcPp 186 - 192 Understanding Mtc Bk 4 pp155.	

	5 & 6			LENGTH	Expresses measurement of length, mass & capacity in English of different items. Makes a table of different units of length, mass and capacity/ volume & shows their abbreviation	The leaner adds m and cm. i) Adds Km and m. iii) Multiplies -m and cm iv) Multiplies Km and m. iii) Solve word problems in addition and multiplication of units of length.	**Length:** i Adding units of length. **Example:** 130 cm +20 cm = 150cm. ii) Multiplying units of length. **Example:** 4 m 40 cm x 2 = 8m 80 cm. iii) Application of addition and multiplication of length units	-Adding units of length. Multiplying numbers Solving word problems in length.	Logical thinking, Problem solving Critical thinking	Demonstration Discussion discovery. Logical thinking, Problem solving Critical thinking	Text Books Rules foot	MK Pri. Mtc Pp 187- 188, 190, 197 – 199.	

	7 & 8	MEASURES	LENGHT, MASS, CAPACITY			The learners i) Subtract units of length carefully. Divide units of length	**Length.** i) Subtracting m and cm. **Example:** 38m 5cm – 2m 20cm = 36m 30 cm. ii) Dividing m and cm. **Example:** 5m 20 cm ÷ 5 = 1m 04cm Km and m. **Example:** 7 Km 700m ÷ 7 = 1 Km 100m.	Subtracting units of length. Dividing units of length		Demonstration discussion			

	7 & 8	MEASURES	LENGHT, MASS, CAPACITY		Expresses measurement of length, mass & capacity in English of different items.	The learners i) Work out perimeter of simple polygons. ii) Apply algebra to solve some complex problems involving perimeter of squares and rectangles. iii) Interpret word problems in form of sketch drawings	**Perimeter.** i) Perimeter of common polygons -triangles, quadrilaterals, pentagons hexagons. Use p= (s + s + s) According to the number of sides. ii) Finding sides of squares / rectangles when perimeter is given. Perimeter = 24 m Find each side of the square. P = 4s. 24 = 4s. 24 ÷ 4 = 4s ÷ 4. 4 cm = s s = 4 cm. ∴ each side is 4 cm.	Working out perimeter of polygons. -Finding missing lengths in squares and rectangles, given perimeter. -Sketching squares and rectangles	Demonstration Discussion Discovery	Logical thinking, Problem solving Critical thinking		Mk Pri. Mtc pp 206 - 208	
					Makes a table of different units of length, mass and capacity/ volume & shows their abbreviation	The learner i) Works out area of & squares rectangles. iii) Identifies different squares or rectangles in one shape, by their dimensions. iv) Works out area of complex squares. v) Work out area of complex rectangles.	**Area** i) Areas of rectangles and squares.  A = L X L Example II 	-Working out area of rectangles and squares. Discovering rectangles and squares by the dimensions -Putting together different areas thus finding total area of complex squares and rectangles.	Guided Discovery Discussion Demonstration.		Textbooks Manile cards cut	MK Pri. Mtc Bk4 Pp210 – 213(Revised Edition)(Old Edition)Pp 206 – 208 Peak Mathematics (six)Pp 10.	

4	3 & 4	mesa ures		length	Expresses measurement of length, mass & capacity in English of different items.	The learner: i) Works out the area of the whole shape and the shaded shape separately. ii) Subtracts area to get the required portion iii) Solves application problems related to area.	Area of shaded and un shaded parts in squares or rectangles. 	- Working out areas of squares and rectangles -Subtracting areas -Solving application problems involving area of squares and rectangles.	Discussion Demonstration.	Text books		MK Pri. Mtc. Bk 5 Pp 212 – 213 Peak MtcSix Pp 10 – 11, 47 Pp 209.	
			Length, capacity and mass	length	Makes a table of different units of length, mass and capacity/ volume & shows their abbreviation	The learner i) Identifies triangles from rectangles and squares. ii) Works out areas of triangles using formula. iii) Identifies perpendicular heights of given iV) Solves problems involving area of triangles.	 Area of sq = LX W. = 6 X 6 cm^2 = 36 cm^2 area of shaded part = ½ of 36 cm^2 = 36 ÷ 2 = 16 cm^2 Area of triangles iii) Application of area of triangles.  4 cm 6 cm 8 cm area = ½ x b x h. = ½ x 8 x 6 cm^2 = 48 ÷ 2 cm^2 = 24 cm^2	) Identifying triangles from squares and rectangles. ii) Identifying perpendicular heights of triangles iii) Solving area problems in triangles.	Discussion Demonstration Guided Discovery	Manila cards bearing shapes of rectangles and squares Text books		Peak Mtc(six) Pp 46 MK Pri. Mtc Bk 4 (Revised) Pp 214 – 218 (Old)Pp 211 – 214 MK Pri. Mtc BK 5 Pp 210 Ex. 8	

4	3 & 4	measures	Length mass, capacity	volume	Expresses measurement of length, mass & capacity in English of different items. Makes a table of different units of length, mass and capacity	The leaner i) Practically packs cubes to discover volumes of given solids. ii) Uses formula to work out volume of cubes and cuboids. iii) Reads units of volume correctly. (Cubic units)	**Volume.** Volume = the space occupied by cubes practical work. i) Using cubes packed in cuboid and bigger cubes, to internalise 'volume' ii) Using formula V= Length x Width x height V= LxWxH. V= LxWXH. V=(2x3x4)cm^3 V=24cm^3 Ans. CM^3 read as cubic cm.	Packing cubes. Working out volumes of solids using formula.	Practical work. Discovery Discussion Observation	Logical thinking, Problem solving Critical thinking	Small cubes Bigger cubes cuboids Tex books	ST(P)Mtc !APp 279 – 280 MK Pri. Mtc BK Pp 218 – 221.	
	7 & 8			Money	The learners identifies coins and notes. - Buying and selling calculates simple profits and loss costs and pricing.	- describes different coins and note. - role plays using money in English - uses examples to describe understanding of profit and loss	MONEY i) **Revision of P.3 Work.** **Conversions** Changing paper money into their equivalencies in coins. Adding money. **Example:** 150 sh. + sh.100 = 250 sh. Subtracting money. **Example:** 7000 sh – 2050 sh = sh.4950	Converting money from coins to paper money equivalents and vice – versa. -Adding money. Subtracting money. -solving word problems involving money	Discussion Demonstration Problem solving	Money in coins and paper form. Text books		MK Pri. Mtc BK 4 (Revised)Pp 148 – 150	

5	1 & 2			money	- identifies coins & notes - buying & selling - calculates simple profit & loss - costs & pricing	- describes different coins and note. - role plays using money in English - uses examples to describe understanding of profit and loss	BUYING AND SELLING **Finding the cost of one item when the cost of one is given.** ii) e.g. 1 tin of butter costs 500/= find the cost of 3 tins. 1 tin costs 500/= (3 tins cost more). 500 x 3 1500/= ∴3 tins cost 1500/= ii) Finding the cost of one item when the cost of many is given. e.g. 3 sweets cost 450/= find the cost of 1 sweet. 3 sweets cost 450/= (1 sweet costs less)	Multiplying money. -Dividing money.	Discussion Demonstration Problem solving	- critical thinking Logical thinking, Problem solving	Money in coins and paper form. Text books	MK Pri. Mtc BK 4 (Revised)Pp 148 – 150	
5	3 & 4	Measures	Length, capacity and mass			The learner interrupts - works out simple expenditures. - Works out balances of money after expenditures.	**MONEY** Simple shopping bills. e.g. Jane bought 2 kg of sugar, 4 packets of salt etc **With provided price list.**	Drawing tables for shopping lists. -Preparing shopping lists. -Adding money -Subtracting money	Discussion demonstration			MK Pri. Mtc BK 4 (Revised) Pp 133 – 134.	

5	5 & 6	Measures	Length, capacity and mass	money	The learner - Identifies coins & notes - Buying & selling - Calculates simple profit & loss - cost & pricing	The learner i) works out shopping bills correctly. ii) Defines profit. iii) Works out profits of given sums. iv) Find the buying price B.P selling price of items when the selling price, or buying price and profit are given Buying price = SP – profit S.P = B.P + Profit.	MONEY I**) more about shopping bills.** **Example:** Juma bought 5 books at 7000/=, 5 pens at 1500/= and 4 cups at 2000/=. Find out the total cost of all the items. 5 book – sh. 7000 5pens – sh. 1500 4 cups – sh. 2000 Total sh.10500	Drawing tables for shopping lists. -Preparing shopping lists. -Adding money -Subtracting money	Discussion demonstration	Logical thinking, - critical thinking Problem solving	Text books Coins notes	MK Pri.Mtc BK 4 Pp 155(Revised) Pp 156. MK Mtc BK 4 Pp 157 – 159.	
6	1 & 3	Measures	Length, capacity and mass	money		The learner i) Defines loss ii) Works out B.P. in different sums. iii) Finds buying /cost prices when the selling and losses are given. Find selling prices when cost / buying prices and losses are given.	**MONEY** **LOSS** Definition Loss = reduction/less Loss=Buying price – selling price. e.g Bought at 15000/= sold at 10,000/= Loss when S.P is less than B.P Loss= B.P – S.P. Loss = sh 15000 Sh 10000 Sh 5000	Working out loss problems Discussing loss problems	Discussion demonstration	Logical thinking, - critical thinking Problem solving	Text books Coins notes	Mk. Mtc bk pg 157	

6	3 & 4	Measures	Length, mass, capacity	Time	Uses different types of clock to tell time. Converts measures of time e.g months to days	The learners Converts seconds to minutes. ii) minutes to seconds. iii) hours to minutes. iii) minutes to hours. iv). Tell time in both local language & English v). Gives months of the year in English	TIME Conversions. i) Changing minutes to seconds. 1 min = 60 sec. 10min =(60 x 10) sec. =600 sec Ans. ii) Changing hours to minutes. 1hr = 60 min. 3hrs = (60x3)min =180min. iii)1 hour = 60 min 1½ hrs = 3/2 x60 iv) Changing Min to hrs. 60min=1hr 90min = 90/60 hrs = 1 ½ hrs.	Changing unites of time from one to the other	Discussion demonstration	Critical thinking Problem solving Logical thinking		MK. Pri.Mtc BK 4 (Old)Pp 167 – 168(Revised) Pp 162-164. Understanding Mtc BK 4 Pp 141.	
6	5 & 6	Measures	Length, mass, capacity	Time		The learner: Applies the concept of multiplication of time	**TIME** **Application of time.** e.g. A bus takes 4½ hours to arrive at K'la. What time does it take in minutes? 1 hour = 60 min. 4 ½ hrs= 9/2 x 60 min. = 540 ÷ 2min = 270 min.	Solving word problems in time. -Adding time. -Multiplying time. -Solving problem involving time.	Discussion demonstration	Critical thinking Problem solving Logical thinking	Text books	MK. Pri.Mtc BK 4 (Old)Pp 164 - 17	

7	1 & 2	Measures	Length, mass, capacity	Time	Uses different types of clock to tell time. Converts measures of time e.g months to days	The learner: Works out time duration	**TIME** **TIME DURATION.** Time duration = length of time **Example** A girl started walking from home at 7.15am. She reached sch. At 8.15am. How long did it take her? 8.15 – 7.15 = 1 .00 It took her 1 hour to reach.	Working out time duration	Text books calendar	Discussion Demonstration Observation Guided discovery		MK. Pri.Mtc BK 4 (Old)Pp 164 - 17	
7	3 & 4	Measures	Length, mass, capacity	Time		The learner Converts hours into days. days into hours. days into weeks. weeks into days.	**Hours, days and weeks.** i) **Conversions.** Examples: 1 day = 24 hours 4 days = 24 x 4 hours = 96 hours. 24 hours = 1 day. 48 hours = 48 ÷ 24 = 2hrs. 1 week = 7 days. 5 weeks = 7 x 5 days. = 35 days. 7 days =1 week. 21 days =21 ÷ 7 weeks = 3 weeks.	Converting days into hours. Hours into days. Days into weeks. Weeks into days.	Text books calendar				

8	1 & 2	measures	Length mass and capacity	Capacity	The learner uses standard measuring instrument to measure length in m, cm, & mm. Mass in kg & g Capacity in l & ml	The learner i) Builds up the table of equivalence in capacity. ii) Converts units of capacity from one to the other. iii) Adds units of capacity. iv) Multiplies units of capacity.	CAPACITY i) Using the equivalence table. ii) Converting L into Ml and vice – versa. **Example** 1litre = 1000 ml 5 litres = 1000 x 5 ml = 5000 ml. 1000 ml = 1 litre. 7000 ml = 7000 ÷ 1000 = 7 litres. iii) Addition of L and Ml. **Example** 4 ½ litres + 2 ½ litres = 6 + 1 litres = 7 litres. iii) Multiplication of L and Ml. **Example** 3 litres 400 ml x 2 = 6 litres 800 ml.	-Filling in equivalence tables. -Converting units from one to the other. Working out capacity problems in addition and multiplication.	Discussion Demonstration	Critical thinking Problem solving Logical thinking	Text books calendar		
8	7 & 8					The learner Subtracts units of capacity. Solves word problems in capacity. Works out problems involving capacity.	i) Subtraction of L and Ml. 7litres 97ml – 3litres 5ml = 4 litres 92 ml Word problems in capacity.	Working out capacity problems in addition and multiplication	Discussion Demonstration	Critical thinking Problem solving Logical thinking	Text books		

						The learner i) Makes estimates of masses ii) Accurately measures masses iii) Converts units of mass from one to the other.	**MASS** Estimates i) Practical measuring of objects. Basic unit – a gram ii) **Conversions.** Kg to g and vice – versa. 1kg = 1000 g 5 kg = 1000 x 5 g = 5000 g 1000g = 1kg 500 g = 500 ÷ 1000 g = ½ kg	Making estimates -Measuring mass -Converting units of mass.	Practical work Group work Discussion Demonstration	Problem solving Critical thinking	Weighing scale Beans Sand Sugar books	Mk Pri. Maths Bk 4 pg 228 - 231	
		Measures	Length, mass and capacity	mass		The learner i) Subtracts units of mass. ii) divide units of mass iii) Solves word problems involving subtraction and division of mass.	i) Subtraction and division of kg and grams. ii) Application of subtraction and division of kg and g.	Subtracting and dividing units of mass. Solving word problems		Problem solving Critical thinking	Text book	Mk Pri. Maths Bk 4 pg 233 - 234	
9	7 & 8		Graph & interpretation of information	Graphs	Use tally marks to collect & group data - Organizes data displays data	- counts object or people - describe the graph, records - Describes the graphs - Explains the graph.	**GRAPHS** -Meaning of graphs. -Types of graphs. -Meaning of pictographs -Features of pictograph. -Read and interpret the given pictograph.	Drawing graphs Using scale to solve problems.	Observation Guided discovery discussion	Problem solving Critical thinking		Mk Pri. Mtc Bk 4 pg 115 - 117	
			Graph & interpretation of		Use tally marks to collect & group data - Organizes	- counts object or people - describe the graph, records - Describes the	**GRAPHS** Drawing pictographs	Drawing pictographs Drawing scale Solving problems.	Observation Guided discover	Problem solving Critical thinking	Drawn graphs on chart	Mk Pri. Mtc Bk 4 pg 115 – 117	

					data displays data	graphs - Explains the graph.	**Bar graphs** Reading & interpreting bar graphs	Drawing bar graphs Drawing scale Solving problems.	y discussio n		s Text book s		