SCHEME OF WORK FOR P.4 MATHEATICS TERM I

WK	PD	THEME	SUB THEME	CONTENT	SUBJECT COMPETECIES	LANGUAGE COMPETENCIES	METHODS	LIFE SKILL	T/L AIDS	T/L ACTS	REF
1	1	**S E T C O N C E P T**	Revision of sets	- Revision of sets; Definition of: - (a) Set (b) Elements - Naming sets - Counting number members in a set listing elements of a set	▪ Group objects of a set. ▪ Draws objects. ▪ Identifies sets. ▪ Listing of members in a set	▪ Defines a set. ▪ Names of types of sets.	Guided discussion Demonstration Illustration Explanation	▪ Critical thinking ▪ Effective communi cation. ▪ Creative thinking.	Real objects coins, tins, pens, books, charts etc.	-Grouping -Drawing -Counting -Oral discussion	A new MK primary MTC book 4 pg 1.
			Types of sets	**Types of sets** ▪ Equal sets and equivalent sets. ▪ Empty sets. ▪ Equivalent and non equivalent ▪ Even and odd sets	• States examples of different types of sets. • Identifies types of sets.	• Defines the types of sets. • Names the different types of sets. • Give oral examples of empty sets	Demonstration Explanation	▪ Creative thinking. ▪ Effective communi cation ▪ Critical thinking	▪ Real objects ▪ A chart	-Matching - Drawing -Naming sets -Listing members.	New MK primary MTC book 4 pg 1-5
	2		Intersectio n of sets	▪ Symbol for intersection. ▪ Drawing venn diagrams and shading. ▪ Listing members in the intersection. ▪ Number of elements in the intersection set.	▪ Writes the symbol for intersection. ▪ Draws venn diagrams. ▪ Shades the intersection. ▪ Lists members.	▪ Defines intersection sets. ▪ Describes the shaded part.	Illustration Demonstration Guided discussion.	Creative thinking Logical thinking	Real objects. A chart showing intersection part.	-Drawing and shading. - Listing members in the intersection .	MK primary MTC book 4 pg9 - 11
2	1		Union and intersectio n of sets	▪ Symbol for union. ▪ Drawing, shading	▪ Writes the symbols for unionsets .	▪ Defines a union set. ▪ Describes	-Think pair share. -Guided	▪ Decision making.	▪ Real objects	▪ Drawing and	MK Pri MTC

				and listing of members in the union set. ▪ Number of elements in the union set.	▪ Draws venn diagrams. ▪ Shades the union set. ▪ Lists members in theunion set.	the shaded regions.	discussion. - Demonstration	▪ Effective communication ▪ creativity	▪ A chart	shading. ▪ Listing members in the union	bk. 4 pg. 13 - 15
2	1	**SETS CONCEPT**	Difference of sets	Inpterprete symbols and find (i) A - B (ii) B - A (iii) n(A-B) (iv) n(B-A)	▪ Interprets the concept of the difference of sets. ▪ Shades the regions. ▪ Draws the regions.	▪ Counts the numbers of members in; A – B B - A ▪ Describes the shaded parts.	▪ Guided discussion ▪ Demonstration ▪ Discovery ▪ Illustration	▪ Effective communication. ▪ Critical thinking. ▪ Creativity	▪ Real objects. ▪ A chart	▪ Drawing ▪ Shading ▪ Listing ▪ Counting	New MK primary MTC book 4 page 13-15
			Sub sets	▪ Number of members in a set. ▪ Listing members in a set. ▪ Listing subsets in a set.	▪ Lists members in a set. ▪ Writes the symbol of subject. ▪ Lists the subsets in a set.	▪ Defines a subset. ▪ Counts the number of subsets.	▪ Guided discussion. ▪ Demonstration. ▪ Discovery.	▪ Creativity. ▪ Effective communication. ▪ Critical thinking.	▪ Real objects ▪ A chart	▪ Listing ▪ Drawing ▪ Counting	New MK Primary MTC bk 4 pg. 21
		NUMBERATION SYSTEM AND PLACE VALUE	Place values	Reading and counting numbers Place values. (a) In words. (b) In figures. Example 4 5 6 3 Ones Tens Hundreds Thousands	• Identifies the place values. • Writes the place values.	• Read the place values in words and in figures. • Counts in tens from 10-200 • Names place values from ones to tens thousands	▪ Guided discussion. ▪ Group illustration.	▪ Creative thinking. ▪ Effective communication. ▪ Decision making.	▪ Abacus ▪ Place value chart.	• Identifying place values. • Writing place values.	New MK Primary MTC book 4 pg 19 – 20.

			Place values of digits in numbers.	Values of digits in numbers. Example 1 What is the value of each in the number 7 4 6 3 2 Tth Th H TO (2x1)=2 (3x10)=30 (6x100)=600 (4x1000)=4000 (7x10 000)=70 000	• Identifies the place values of digits. • Writes the place values on each digit. • Multiplies digits by their place values. • Writes the values.	• Reading values in words.	▪ Guided discovery ▪ Demonstration. ▪ Illustration.	▪ Creative thinking. ▪ Effective communication. ▪ Discussion making.	▪ Place value chart. ▪ Abacus.	▪ Identifying place values. ▪ Multiplying of digits by P.V. ▪ Writing values.	New MK Primary MTC Bk 4 pag 21.
		NUMBERATION SYSTEM AND P	Expanding of numbers	Expanding of numbers ▪ Using place values ▪ Using values.	▪ Identifies place value. ▪ Writes the values. ▪ Writes in expanded form.	▪ Reads the place values. ▪ Reads the values.	▪ Illustration. ▪ Discovery ▪ Group work	▪ Effective communication. ▪ Logical thinking ▪ Decision making	▪ A place value chart.	-Identifying values. -Writing values. -Expanding numbers.	New MK primary MTC bk 4 pg 21.
3	1		Expanded numbers	What number has been expanded (7 x 1000) +(4 x 100 + (3x10) + (8 x 1)	▪ Multiplies the numbers correctly. ▪ Adds the numbers. ▪ Identifies the expanded number.	▪ Reads the figures. ▪ Reads the expanded number.	▪ Guided discovery. ▪ Group work. ▪ Illustration.	▪ Effective communication. ▪ Logical reasoning.	▪ Place value chart.	-Multiplying -Adding -Identifying	New MK primary MTC book 4 pg 24
	2		Writing words in figures and vice versa	▪ Writing figures in words. ▪ Writing words in figures.	▪ Writes figures in words. ▪ Writes words in figures.	▪ Reads figures correctly. ▪ Reads words correctly.	▪ Explanation ▪ Guided discovery ▪ Discussion.	▪ Effective communication. ▪ Creative thinking. ▪ Logical reasoning.	▪ Place value chart.	-Writing -Reading -Arranging digits.	New MK primary MTC bk 4 pgs. 22-23

		L A C E V A L U E	Rounding off of whole numbers	▪ Rounding off to the nearest tens. ▪ Rounding off to the nearest hundreds. ▪ Rounding off to the nearest thousands.	▪ Mentions the meaning of approximate. ▪ Rounds off numbers to the nearest tens / hundreds.	▪ Mentions the meaning of approximate. ▪ Reads the number given.	▪ Discovery ▪ Discussion ▪ Illustration	▪ Logical thinking. ▪ Critical thinking. ▪ Effective communication.	▪ Place value chart.	-Rounding off to the nearest tens / hundreds.	New MK primary MTC bk 5 pages 54 - 55
	3		Roman numerals	▪ Basic roman numerals. ▪ Roman numerals got by repeating x, c ▪ Roman numerals got by adding subtracting.	▪ Identifies roman numerals. ▪ Adds the Roman numerals. ▪ Subtracts the Roman numerals.	▪ Recites the roman numerals. ▪ Mentions the Roman numerals obtained.	▪ Explanation ▪ Discussion ▪ Discovery.	▪ Creative thinking. ▪ Problem solving. ▪ Logical thinking.	▪ Chart showing Roman numerals.	-Reciting the Roman numerals.	New MK Primary MTC bk 4 pg 33
	4		Roman numerals	▪ Changing from Hindu Arabic numerals to Roman numerals. ▪ Changing from Roman numerals to Hindu Arabic numerals. ▪ Word problems about Roman and Hindu Arabic numerals.	▪ Writes the Hindu Arabic numerals in Roman numerals. ▪ Writes the Hindu Arabic numerals correctly. ▪ Writes the Roman numerals in Hindu Arabic.	▪ Recites the Roman numerals. ▪ Reads the statements given correctly.	▪ Explanation ▪ Discussion ▪ Discovery.	▪ Creative thinking. ▪ Problem solving. ▪ Logical thinking.	▪ Chart showing Roman numerals.	-Writing the Roman numerals. -Reading the statement given.	New MK Primary MTC bk 4 pg. 34-35.
				▪ Addition and subtraction of roman	▪ Adds Roman numerals. ▪ Subtracts	▪ Reads the given word	▪ Guided discussion ▪ Illustration	▪ Problem solving. ▪ Creative		-Adding roman numerals.	New MK Pri MTC bk

				numerals.	roman numerals.	problem. ▪ Recites the Roman numerals.	▪ Discovery.	thinking. ▪ Logical thinking.		Subtracting roman numerals.	4 page 35 Oxford pribk 4 page 67.
4	2	OPERATION ON WHOLE NUMBERS	Adding up to ten thousand	Addition ▪ Without word problems. ▪ With word problems.	▪ Adds numbers without word problem correctly. ▪ Adds numbers with word problems correctly.	▪ Reads numbers in words. ▪ Interprets the word problem given.	▪ Explanation. ▪ Guided discussion. ▪ Guided discovery.	▪ Problem solving. ▪ Logical thinking. ▪ Creative thinking. ▪ Effective communication	▪ Flash cards showing numbers for addition.	Adding numbers. Reading the word problem.	New MK MTC Bk. 4 pages 38 - 41
			Subtracting up to ten thousand	▪ Subtraction. ▪ Without re-grouping. ▪ With re-grouping.	▪ Subtracts numbers without regrouping. ▪ Subtracts numbers with regrouping.	▪ Reads the numbers in words correctly. ▪ Uses the new words to make correct sentences	▪ Explanation. ▪ Guided discovery. ▪ Guided discussion.		▪ Flash cards showing numbers for subtraction ▪ Using abacus	Subtracting numbers with or without regrouping.	New MK primary MTC bk pages 42 – 43.
5	2	OPERATIO	Subtracting up to ten thousand	▪ Subtraction with regrouping.	▪ Subtracts numbers with regrouping. ▪ Arranges numbers according to their correct place values.	▪ Reads the numbers given in words. ▪ Arranges numbers according to their correct.	▪ Explanation. Guided discovery. ▪ Guided discussion	▪ Problem solving. ▪ Logical thinking. ▪ Creative thinking.	▪ Flash cards showing numbers for subtraction	Subtracting with regrouping.	New MK primary MTC bk 4 pg 43 - 44
	3		Multiplication	**Multiplication** • Multiplication as repeated addition. • By multiples of ten 90, 80. 70 … • Three digit	▪ Multiplies given problem. ▪ Identifies the multiples of ten.	▪ Reads the word problem. ▪ Recites the multiples of ten. ▪ Uses correct	▪ Explanation. Discussion ▪ Discovery. ▪ Rote method	▪ Creative thinking. ▪ Logical thinking. ▪ Problem solving.	▪ Counters. ▪ Multiplication table.	Multiplying numbers	New MK primary MTC bk 4 pages 46 - 51

		N O N		figures by one digit. • Two digit figures by 2 digits. • Multiplication on word problems.		mathematical terms for multiplication e.g 2 multiplied by 3					
6		N U M B E R S	Division	▪ Division as repeated subtraction. ▪ Without remainders.	▪ Divides numbers using repeated subtraction. ▪ Divides numbers using long division methods	▪ Counts the number of times a number has been subtracted			▪ Counters	Counting numbers that have been divided.	New MK primary mathsBk 4 pages 52 - 55
				▪ Division by one digit number ▪ Division with remainders. ▪ Division by 10s ▪ Word problems.	▪ Divides numbers using long division methods.	▪ Recites the multiplication table. ▪ Reads the word problems.	▪ Discussion. ▪ Guided discovery. ▪ Demonstration.			-Dividing numbers using long division. -Multiplying. Subtracting	New MK Primary MTC Bk 4 pages 53 – 55.
			Average	▪ Average without word problem. ▪ With word problem.	▪ Solves the number given. ▪ Adds numbers. ▪ Divides the number correctly.	▪ Reads the number or digits given. ▪ Reads the statement given.	▪ Explanation. ▪ Guided discussion. ▪ Discovery.	▪ Problem solving. ▪ Critical thinking. ▪ Discussion making.	▪ Counters in bundles.	Finding the average.	New MK Pr. MTC bk5 pg. 76 - 77
		P A T T E R N S	Types of numbers	<u>Types of numbers</u> ▪ Counting numbers. ▪ Whole numbers. ▪ Even numbers ▪ Odd numbers.	▪ Identifies the types of numbers. ▪ Finds the missing numbers.	▪ Recites the numbers. ▪ Counts numbers correctly.	▪ Explanation. ▪ Guided discussion. ▪ Discovery.	▪ Problem solving. ▪ Critical thinking. ▪ Discussion making.	▪ Chart showing examples of the types of numbers.	Giving types of numbers.	New MK primary MTC bk 4 pg. 61.
			Number sequences	Number sequences ▪ By adding numbers like 2, 4, 6, … ▪ By subtracting	▪ Identifies the next numbers by adding. ▪ Identifies the next number by	▪ Counts numbers. ▪ Mentions the next number in			▪ Chart showing number sequences.	Finding the next number in the sequences.	New MK Pr. MTC bk4 pages

				numbers like 6, 4, 2……	subtracting.	the sequence.					61 – 62
7	1	A N D S E Q U E N C E S		Number sequences ▪ By subtracting numbers like 6, 4, 2. ▪ Find missing numbers in a sequence	▪ Identifies the next number in the sequence by subtracting.	▪ Counts numbers. ▪ Mentions the next number in the sequences	▪ Explanation ▪ Discussion ▪ -Guided discovery	▪ Problem solving. ▪ Logical thinking. ▪ Creative thinking	▪ Chart showing number sequences	Finding the next number in the sequences	New MK. Pr. MTC bk 4 pg. 62-63
	4		Multiples	**Multiples** ▪ Listing multiples of given numbers. ▪ Common multiples. ▪ Lowest common multiples. ▪ Counting in tens, hundreds and thousands. ▪ Multiplying by 10, 100 and 1000. ▪ Multiplying by multiples of 10. ▪ Factors of numbers ▪ GCF if numbers ▪ Completing tables	▪ Finds the multiples of various numbers. ▪ Lists the common multiples. ▪ Multiples various numbers like 10, 100, 1000	▪ Defines multiples. ▪ Mentions the multiples of various numbers. ▪ Counts in tens, hundreds and thousands.				Finding the multiples.	New MK Pr. MTC bk 4 pg 64 - 71
7	4	Number facts and sequences	Magic square.	▪ Magic square	▪ Completes the magic square	▪ Find the value of the missing numbers			▪ Chart showing magic square.	Finding the missing numbers in the magic square.	Old MK Pr. MTC bk 4 pg. 72-73 Understanding MTC bk 4 pg 88.

TOPICAL BREAKDOWN FOR P.4 MATHEMATICS TERM I

THEME	TOPIC	SUB-TOPIC	DURATION	OUT COMES
SETS	SET CONCEPT	• Types of sets . Empty • Equal • Equivalent • Forming sets • Listing members in sets • Finding number of members • Finding common members. • Union of sets • Shading and describing shaded regions. - Representing information on the venn diagram - Interpreting information on the venn diagram	1 ½ (1 – 2)	• The learner is able to demonstrate the knowledge of sets to the problems in real life situations.
NUMERACY	WHOLE NUMBERS	• Place values of numbers up to 99. 999 • Values of numbers • Sum and difference of values of digits. • Expanding whole numbers using place values and values • Finding the expanded number • Writing in words • Writing in figures • Round off to the nearest tens, hundreds and thousands • Roman numerals up to 100 • Application of Roman numerals. • Hindu Arabic numerals	2 wks (3- 4)	• The learner is able to appreciate the need to count in everyday life .
	OPERATION ON WHOLE NUMBERS	• Addition of whole numbers up to 99999 with and without neigbouring • Word problem about addition • Subtraction of whole numbers up to 99999 with and without regrouping. • Word problem on subtraction • Multiplication as repeated addition. • Multiplication of whole numbers up to 3 digital distributed by 1and 2	3 weeks (5 – 7)	• The learner is able to use the four basic operations to solve problems.
		• World problem on multiplication. • Division as repeated subtractions. • Division of whole numbers by 1 digit numbers. without a remainder With a remainder • Division on word problems • Division of whole numbers by 10 • Average • Word problem involving division;		•

	PATTERNS AND SEQUENCE	• Types of numbers (even and odd) • Finding sum, product and difference of numbers /even and odd. • Sequence of numbers. • Increasing progression • (addition and multiplication) • Decreasing progression • (Subtraction)	2 weeks (8 – 9)	• The learner is able to able to relate and apply simple computation skills involving patterns and sequences in real life situation
		• Multiples of numbers • LCM • Multiples of 10, 100, and 1000 • Factors of numbers. • Finding GCF of numbers. • Completing tables (wheels) • Magic squares		

SCHEME OF WORK FOR P.4 MATHEATICS TERM II

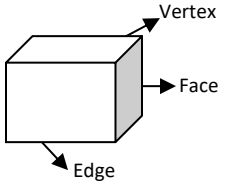
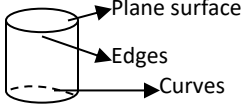
WK	PD	THEME	SUB THEME	CONTENT	SUBJECT COMPETECIES	LANGUAGE COMPETENCIES	METHODS	LIFE SKILL	T/L AIDS	T/L ACTS	REF
		F R A C T I O N S	Revision	Fractions (Lower work) • Definition. • Shading / Naming fractions. • Writing fractions in words and figures. • Types of fractions.	▪ Defines fractions. ▪ Shades the given fractions ▪ Gives examples of fractions.	▪ Defines fractions. ▪ Names the types of fractions.	▪ Explanation ▪ Demonstration. ▪ Guided discovery	▪ Effective communication. ▪ Creativity.	▪ Real objects e.g. oranges, apples papers.	Collecting objects. Shading Naming.	MK Bk.3 pg. 94 – 98. A new MK Bk 4 pg. 80 - 86
			Fractions	• Equivalent fractions. • How to get equivalent. • Finding missing parts of fractions. • Reduce fractions of atleast one factor • Comparing Fractions. • Ordering simple fractions.	• Multiples and dives. • Compares fractions. • Reduces fractions to lowest term. • Identifying simple equivalent fractions using diagrams	• Describes and names equivalent fractions. • Writes equivalent fractions.	• Group discussion. • Question and answer.	▪ Problem solving. ▪ Effective communication. ▪ Critical thinking.	▪ Flash cards. ▪ Charts showing fractions	Cutting Shading	MK primary MTC bk 4 pg 82 - 86
			Operations on fractions	**<u>Addition of fractions</u>** • With same denominators. • With different denominators. **<u>Subtraction of fractions</u>** • With same denominators. • With different	▪ Adds fractions with same and different denominators. ▪ Subtracts fractions with same and different denominators.	▪ Reads fractions given	▪ Demonstration. ▪ Illustration. ▪ Group discussion.	▪ Effective communication. ▪ Critical thinking ▪ Creativity.	▪ Pupils chart showing fractions .	▪ Cutting. ▪ Grouping ▪ Reading	New MK Bk 4 Pg. 87-97.

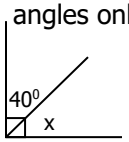
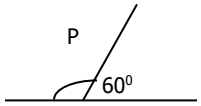
				denominators. •							
		F R A C T I O N S		**Writing mixed as proper fraction** ▪ Changing improper fractions to mixed numbers. **Addition of mixed numbers** ▪ With same denominators only **Subtraction of mixed numbers.** ▪ With same denominators only **Fractions of a group** ▪ What is ½ of 6? ▪ Find the remaining fractions. ▪ Multiplication of fractions.	▪ Changes mixed numbers to improper fractions. ▪ Adds and subtracts mixed fractions. ▪ Uses fractions of a group to apply in given numbers.	▪ Reads fractions. ▪ Defines the type of fractions.	▪ Demonstration on on. ▪ Guided discovery. ▪ Explanation.	▪ Creativity. ▪ Logical reasoning.	▪ Real objects like text books.	▪ Cutting ▪ Grouping ▪ Reading	New MK Bk. 4 Pg. 87 - 97
2	1		Decimals	**Decimal fractions** ▪ Writing decmals -in words -in figures upto tenths ▪ Expressing fractions as decimals upto thenths ▪ Expressing decimals as fractions up to thenths ▪ Place values of decimals upto tenths	▪ Write decimals in words and figuresupto tenths. ▪ Express decimals as common fractions up to tenths. ▪ Add decimal using a number line. ▪ Order fractions from big to small and vice versa. ▪ Subtract	▪ Uses the word decimals in problems "point"	▪ Guided discovery. ▪ Think pair share. ▪ Demonstration. ▪ Illustration.	▪ Effective communication. ▪ Creative thinking. ▪ Problem solving.	▪ Abacus. ▪ Flash cards.	▪ Collecting objects like bottle tops. ▪ Cutting.	New MK primary MTC book 4 pages 98 - 111

				▪ Tenths ▪ Addition on decimals	decimal fractionsupto tenths.						
				Ordering decimals.	▪ Interpret word problems.						
		2-D IMENSIONAL GEOMETRY	Identifying 2 – dimensional figures	**Plane shapes** Examples: ▪ Rectangles. ▪ Circle ▪ Rhombus ▪ Oval ▪ Square ▪ Kite ▪ Trapezium ▪ Triangle ▪ Paralleogram ▪ Rhombus	1. Identifies plane shapes. 2. Draws given shapes. 3. Writes the properties of shapes.	▪ Describes and names shapes of 2 – dimensional figures. ▪ States the properties of the shapes.	▪ Demonstration. ▪ Explanation ▪ Discussion.	▪ Effective communication. ▪ Logical reasoning. ▪ Creativity	▪ Objects with such shapes e.g. balls, baskets, cups, eggs etc.	• Identifying • Drawing • shaping	New MK Bk. 4 pg. 125. MK pupils Bk. 3 pg. 126
			Drawing ling segments	Drawing and measuring line segments. Example. End point End point 5cm	• Draws line segments. • Measures line segments	• Uses the word "segment" • Make correct sentences	▪ Illustration. ▪ Demonstration. ▪ Explanation	▪ Logical reasoning. ▪ Creativity. ▪ Effective communication.	▪ Dividers. ▪ Pencil. ▪ Rules etc	▪ Drawing ▪ Measuring	A new MK Bk. 4 Pg. 142.
			Drawing and measuring angles	▪ Drawing angles using a protractor. ▪ Measuring ∠s using a protractor e.g. 50^0, 30^0, 60^0, 90^0 not exceeding 90^0	▪ Draws angles using a protractor. ▪ Measuring angles using a protractor.	▪ Uses the word "Protractor" ▪ "Angles" etc	▪ Demonstration. ▪ Guided discovery. ▪ Explanation. ▪ Illustration	▪ Effective communication. ▪ Logical reasoning. ▪ Accuracy.	▪ Rulers. ▪ Protractor ▪ Dividers.	▪ Drawing. ▪ Measuring.	New Mk Bk 4 Pg. 143.

3	1		Constructing squares, rectangle and equilateral triangles	1. Constructing squares 2. Rectangles using a protractor when given sides.	▪ Constructs squares, rectangles, using a protractor.	▪ Describes ▪ Identifies and names the instruments for construction	▪ Demonstration. ▪ Explanation	▪ Effective communication. ▪ Critical thinking. ▪ Logical reasoning.	▪ Protractors. ▪ Dividers ▪ Rulers ▪ Pencils ▪ Pair of compass	▪ Drawing ▪ Constructing. ▪ Measuring.	
		2-DIMENSIONAL GEOMET		3. Constructing equilateral triangles when given sides using a pair of compasses only.	▪ Constructs equilateral triangles using a pair of compasses only when given sides.	Identifies and names the instruments used for construction	Demonstration Explanation	Critical thinking Logical reasoning	Protractor Dividers Ruler Pencil Pair of compasses	Drawing Constructing Measuring	
			Right angles	▪ Drawing and recognising right angles.	▪ Recognizes right angles. ▪ Draws right angles using a protractor only.	▪ Points out and names right angles in the class room and in the play ground.	▪ Explanation. ▪ Illustration. ▪ Guided discovery. ▪	▪ Logical reasoning. ▪ Creative thinking. ▪ Effective communication.	▪ Protractors. ▪ Dividers. ▪ Rulers ▪ Pair of compasses.	-Drawing. -Identifying -Constructing. -Measure.	New MK pupils bk 4 Pg. 144.
			Perimeter	1. Finding perimeter when given sides e.g ▪ Squares ▪ Rectangles ▪ Triangles.	▪ Finds perimeter of squares, rectangles and triangles when given sides.	▪ Explains the meaning of perimeter. ▪ Illustrates perimeter of figures in exercise books.	▪ Illustration. ▪ Demonstration ▪ Explanation.	▪ Critical thinking. ▪ Effective communication. ▪ Logical thinking.	▪ Cuts of squares, rectangles and triangle.	▪ Drawing shapes. ▪ Finding missing side.	New MK Bk 4 Pg. 204

	4	R Y	Area	▪ Finding area of square ▪ Finding area of a rectangle ▪	▪ Finds area by both counting and using formular ▪ .	▪ Explains the meaning of area. ▪ Finds the area.	▪ Explanation ▪ Demonstration. ▪ Guided discovery.	▪ Critical thinking. ▪ Problem solving. ▪ Effective communication.	▪ Cuts outs of shapes like squares, rectangles.	Drawing shapes. Identifying sides. Finding area.	New MK Bk 4 Pg. 209
		2-D I M E N S I O N A L G E O	Circles	**Making circles** ▪ Using hard paper. ▪ Using strings. ▪ Using the big toe. ▪ Using a pair of compasses.	▪ Makes circles using hard papers and toes. ▪ Uses a pair of compasses to draw circles.	▪ Identifies names and uses both strings and hard papers to make circles.	▪ Demonstration. ▪ Explanation. ▪ Discussion	▪ Critical thinking. ▪ Problem solving. ▪ Creativity.	▪ Strings. ▪ Hard papers.	Making and drawing circles.	New MK Bk. 4 Pg. 134.
			Parts of a circle	Naming parts of a circle. Example. ▪ Diameter ▪ Radius ▪ Chord ▪ Circumference	1. Names the parts of a circle.	▪ Identifies names and uses the words like radius Diameter	▪ Explanation. ▪ Illustration ▪ Demonstration ▪ Guided discovery.	▪ Logical reasoning. ▪ Creativity. ▪ Effective communication	▪ Cutouts. ▪ Chart showing parts of a circle.	▪ Identifying. ▪ Drawing ▪ Naming parts.	New MK Bk 4 Pg. 135.
			Diameter and radius	1. Finding diameter when given radius. 2. Finding radius when given diameter.	▪ Finds diameter. ▪ Measures diameter. ▪ Finds radius ▪ Measures radius.	▪ Explains and uses / relates polygons as used in our daily life.	▪ Explanation. ▪ Discussion. ▪ Question and answer.	▪ Logical reasoning. ▪ Critical thinking. ▪ Creativity.	▪ Real objects. ▪ Cut outs. ▪ Strings ▪ Rulers.	▪ Relating parts of a circle. ▪ Finding length of diameter and radius.	Mk Bk. 4 Pg. 139-140

		M E T R Y	Polygons	▪ Drawing and naming some polygons ▪ Triangles ▪ Square ▪ Rectangle ▪ Pentagon – five sides. ▪ Hexagon – Six sides.	▪ Identify and names the polygons.	▪ Explains and uses / relates polygons as used in our daily life.	▪ Explanation. ▪ Discussion. ▪ Question and answer.	▪ Logical reasoning. ▪ Creativity. ▪ Effective communication.	▪ Cut outs. ▪ Real objects etc.	- Identifying. -Naming reading	reperto ire
		3 – D I M E N S I O N A L F I G U R E S / G E O	3-dimensional geometry Identification.	Identifying and naming 3 – dimensional figures. Example ▪ Cone ▪ Cylinder ▪ Cube ▪ Cuboid ▪ Triangular pyramid etc.	▪ Identifying 3 – dimensional figures. ▪ Naming 3-dimensional figure. ▪ Drawing 3 – dimensional figures.	▪ Names and indentifies common solids in English and mother tongues.	▪ Explanation. ▪ Illustration ▪ Discovery. ▪ Question and answer.	▪ Creative thinking. ▪ Logical reasoning. ▪ Effective communication.	▪ Models. ▪ Cutouts. ▪ Real objects of such shapes.	Drawing and naming.	New Mk Bk 4 Pg. 128.
			Naming parts of the solid shapes.	Parts of solid shapes. Example 1. Cube & cuboid  (a) 6 faces (b) 8 vertices (c) 12 edges 2. Cylinder  	▪ Identifies and labels, faces, edges and vertices. ▪ Counts the number of faces, edges and vertices.	▪ Identifies names and uses words like; edges, vertices and faces in our daily life.	▪ Explanation ▪ Denomination ▪ Illustration ▪ Guided discovery	▪ Critical thinking. ▪ Effective communication ▪ Creativity.	▪ Models ▪ Real objects ▪ etc.	Drawing. Naming Identifying.	A New Mk Bk 4 Pg. 130.

		M E T R Y		(a) 1 curved surface (b) 2 plane surfaces (c) Area of parts of cube and cuboid (d) Volume of cubes and cuboid.							
		3 DIMENSIONAL GEOMETRY	Angles	**Types of angles** 1. Right angles (Complementary angles of 2 angles only  $X + 40^0 = 90^0$ $X+40^0-40^0 = 90^0- 40^0$ $X = 50^0$ 2. Straight angles (Supplementary angles of 2 angles only  $P + 60^0 = 180^0$ $P+60^0-60^0=180^0-60^0$ $P = 120^0$	1. Identify the different types of angles. 2. Find the complement and supplement of angles.	▪ Explains the meaning of complement + and supplement angles.	▪ Explanation. ▪ Question and answer. ▪ Discussion ▪ Demonstration ▪ Illustration	▪ Problem solving. ▪ Logical reasoning. ▪ Effective communication	▪ Cut outs. ▪ Text books ▪ Illustration ▪ Chalkboard	▪ Identifying angles ▪ Finding missing numbers	New MK primary MTC bk 4 pg.

		DATA HANDLING	Tallies	Interpretation and drawing of picto graphs, bar graphs and line graphs	▪ Uses tally marks to collect and group data. ▪ Organizes data. ▪ Displays data. ▪ Interprets data.	▪ Counts objects / people. ▪ Records. ▪ Describes graphs. ▪ Explains graphs.	▪ Explanation. ▪ Question and answer. ▪ Illustration. ▪ Discussion. ▪ Demonstration.	▪ Effective communication. ▪ Logical thinking. ▪ Creative thinking. ▪ Problem solving.	▪ Real objects e.g. ▪ Straws books. ▪ Pens ▪ Bottle tops.	▪ Counts tally marks. ▪ Growing using tallies. ▪ Drawing ▪ Reading ▪ Interpreting. ▪ Displaying ▪ Collecting ▪ Writing.	New MK MTC Primary Bk 5 Pg. 115 – 123. Mk Old Edition P/S Bk 5 Pg.

TOPICAL BREAKDOWN FOR P.4 MATHEMATICS TERM II 2016

THEME	TOPIC	SUB-TOPIC	DURATION	OUT COMES
NUMERACY	FRACTIONS	• Types of fraction • Naming parts of a mixed fraction • Conversion of mixed to improper and vice versa • Finding equivalent fractions • Reducing fractions • Comparing fractions • (≤, ≥ or =). • Operation on proper fraction • (Subtraction and addition only) • Operation on mixed fractions (addition and subtraction) • Word problem involving addition and subtraction of fraction. • Addition on different denominators • Subtraction of different denominators • Multiplication of fractions • Application of fractions • Decimal fractions. • From common to decimal and vice versa. • Place values of decimals • Addition on decimals • Subtraction on decimals • Arranging decimals	2 weeks	The learner is able to solve problems involving fraction and relating them to real life situation
MEASURES	DIMENSIONAL GEOMETRY	• Identifying and naming two dimensional figures • Matching of pictures of figures to their names. • Drawing two dimensional figures (triangle, square, rectangle) • Drawing line and measuring line segments • Drawing and measuring angles. • Identifying right angles • Constructing 90^0 • Constructing a square • Constructing a rectangle • Constructing an equilateral triangle	4 weeks	The learner is able to recognize and construct various geometric figures and relate them to other fields such as architectural drawings.
		• 3. Dimension • Naming solid shapes • Identifying properties of three dimensional figures (cube, cuboid, cylinder) • Marking and drawing 3 dimensional figures • Finding volume of a cube and cuboid. • Angles of a triangle • Right and straight angles.		

Interpretation of graphs and data	Data handling	• Counting and representing numbers using tally marks. • Drawing picto graphs • Interpreting picto graphs, • Recording information using tally marks • Reading, drawing and interpreting tables • Drawing and interpreting bar and line graphs	1 ½ weeks	The learner is able to interpret and draw and solve problems involving graphs
Measurements	Money	• Recognition of notes • Currency • Addition of money • Completing shopping bills tables • Finding profits and losses • Costs and prices	1 ½ weeks	The learner is able to solve practical problems related to utilization of Uganda currency in everyday life.

SCHEME OF WORK FOR P.4 MATHEATICS TERM III 2016

WK	PD	THEME	SUB THEME	CONTENT	SUBJECT COMPETECIES	LANGUAGE COMPETENCIES	METHODS	LIFE SKILL	T/L AIDS	T/L ACTS	REF
		M E A S U R E S	**Money**	▪ Recognition of money. ▪ Coins ▪ Bank notes ▪ Change shs. to cents and vice versa. ▪ Adition of money ▪ Subtracting of money. ▪ Multiplication of money. ▪ Direct proportions. ▪ Buying and selling shopping bills. ▪ Division of money. ▪ Profit and loss. ▪ Postage rates.	• Identifies coins and notes. • Buying and selling. • Calculates simple profits and loss. • Costs and pricing.	• Describes different coins and notes. • Roles playing using money in English. • Uses examples to describe meaning of profit and loss.	• Discussion. • Explanation. • Observation. • Demonstration • Dramatization. • Role playing.	▪ Effective communication. ▪ Critical thinking. ▪ Creativity.	▪ Coins. ▪ Bank notes. ▪ Classroom shape ▪ Real objects. ▪ Backs pens. ▪ Tins ▪ Envelopes ▪ Straws ▪ Bottles etc	Role playing using money. Role playing the buyer andseller. Describing coins notes. Giving examples of profit and loss. Working out problems involving profits and loss.	
			Time	• Revision on time. • Telling time. • Changing hours to minutes. • Addition of time. • Word problems. • Subtraction of time. • Word problem • Time in a.m. and	▪ Uses different types of clocks to tell time. ▪ Converts measures of time. ▪	▪ Tells time in the local language and English. ▪ Gives months of the year in English.	▪ Explanation. ▪ Discussion ▪ Question and answer. ▪ Observation. ▪ Demonstration. ▪ Role playing.	▪ Effective communication. ▪ Critical thinking. ▪ Creative thinking. ▪ Logical thinking. ▪ Effective	▪ Wall clocks. ▪ Calendars. ▪ Timetable.	▪ Using real or model clock, the learner tells time. ▪ Making a calendar showing what month of	New edition MTC MK pupils Bk 4 Pg. 161 185

				p.m.				communicat ion.		the year. ▪ Working	
				• Changing days to hours. • Changing hours to days. • Changing weeks to days. • Changing days to weeks. • Addition of weeks and days • Subtraction of time in weeks and days.	months to days.	timetable in his / her exercise book.	▪	▪ Critical thinking.	▪	out problems involving time. ▪ Reading.	
		MEASU REMEN TS	Capacity	• Half and quarter litres. • Addition of litres as half litres. • Addition of litres and milliliters.	• Adds litres as half litres and millililiters.	• Expresses capacity of different items	▪ Discussion. ▪ Explanation. ▪ Question and answer.	▪ Critical thinking. ▪ Effective communicat ion. ▪ Logical reasoning.	▪ ½ litre containers. ▪ 1 litre container.	▪ Packing ▪ Adding.	New MK MTC MK Bk. 4 pg. 222 – 227.
			Weight and volume (mass)	• Half and quarter Kg. • Changing Kg and gm and vice versa. • Add and subtract kg and gm. • Dozens, crates, trays. • Volume of cubes and cuboids.	• Changes Kgms go gms and vice versa. • Adds and subtracts kgms and gms.	• Expresses weight and volume of different items.	▪ Discussion. ▪ Explanation ▪ Question and answer.				New MK MTC pupils Bk 4 Pg. 228 – 235

		A L G E B R A	Equations with and without letters	▪ Revision (using letters for numbers) ▪ Adding letters e.g. P+P = 2P 2k + 4k = 6k ▪ Finding perimeter using letters for numbers. ▪ Subtracting letters. ▪ Collecting like terms involving addition only . ▪ Substitution. Equation of: ▪ Addition ▪ Subtraction ▪ Division e.g. 2x = 8, x÷2 = 4 ▪ Forming equations of addition and subtraction.	▪ Adds letters. ▪ Uses letters for numbers. ▪ Finds perimeter using letters for numbers. ▪ Collects like terms. ▪ Does substitution. ▪ Solves given equations. ▪ Forms equations and solve them.	▪ Reads and creates simple equations without letters.	▪ Guided discovery. ▪ Participatory approach. ▪ Discussion. ▪ Brain storming.	▪ Effective communication. ▪ Critical thinking. ▪ Problem solving.	▪ Books. ▪ Pens ▪ Text books.	-Adding -Subtract -Forming equations	MK primary pupils bk 4 pg. 245-260

TOPICAL BREAKDOWN FOR P.4 MATHEMATICS TERM III 2016

THEME	TOPIC	SUB-TOPIC	DURATION	OUT COMES
MEASUREMENTS	TIME	• Days of the week • Conversion of days to weeks and vice versa. • Month of the year. • Converting years into months and vice versa. • Converting months to days • Telling time • Changing days to hours and vice versa • Changing hours to minutes and vice versa. • Finding duration.	2 week (1-3)	• The learner is able to apply the knowledge of time in real life situation.
	Length Mass Capacity	• Measuring length (M and cm) • Finding perimeter and area of a square, rectangle and triangle. • Measuring mass • Converting mass (Kg to g and vice versa) • Measuring capacity. • Litres to milli8litres • Word problems involving capacity	4 weeks (8 – 9) (3 – 7)	• The learner is able to recognize and use standard instruments and units for measuring mass, length and capacity
ALGEBRA	Equations	• Collecting like terms • Finding the missing numbers in (1)addition,(2)subtraction, (3)multiplication and (4)division. • Word problems on missing numbers. • Substitution. • Equations with addition • Subtraction • Multiplication • Division • Forming and solving equation.	2 weeks (7 – 9)	• The learner is able to solve mathematical problems and puzzles using the knowledge of Algebra.