

## SCHEME OF WORK - TERM ONE

WK	PD	THEME	TOPIC	SUB TOPIC	CONTENT	Subject competence	Language competence	Life skills	Method	t/l aids	REF	REM.
<b>1</b>	1	<b>SETS</b>	<b>Set Concepts</b>	Types of sets	<ul style="list-style-type: none"> <li>- Equal sets</li> <li>- Equivalent set</li> <li>- Unequal</li> <li>- Non equivalent sets</li> <li>- Matching sets</li> </ul>	<ul style="list-style-type: none"> <li>- Spells</li> <li>- Reads, pronounces and uses new words in the sentences</li> </ul>	<ul style="list-style-type: none"> <li>- Lists , counters, elements of different sets</li> </ul>	<ul style="list-style-type: none"> <li>- Creative thinking</li> <li>- Critical thinking</li> <li>- Problem solving</li> <li>- Effective communication</li> <li>- Interpersonal relationship</li> </ul>	<ul style="list-style-type: none"> <li>- Real objects</li> <li>- Flash cards</li> <li>- Charts</li> <li>- Containers</li> <li>- Counters</li> <li>- Stones</li> <li>- Sticks</li> <li>- Abacus</li> <li>- Papers</li> </ul>	<ul style="list-style-type: none"> <li>- creative thinking</li> <li>- Effective communication</li> <li>- Cooperation</li> <li>- Critical thinking</li> <li>- Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>- Mk new edition pg 1-2</li> <li>- Understanding mtcpp 1-3</li> <li>- Fountain printc 1-8</li> <li>- Fountain pg 8-10</li> <li>- Curriculum pg 149-151</li> </ul>	-
	2				<ul style="list-style-type: none"> <li>- Intersecting set</li> <li>- Joint sets</li> <li>- Disjoint sets</li> <li>- Union sets</li> <li>- Universal sets</li> </ul>	-	<ul style="list-style-type: none"> <li>- Draws Venn diagrams</li> <li>- Lists elements</li> <li>- Identifies elements</li> </ul>	- Do	- Do	- Do	- Do	-
	3				<ul style="list-style-type: none"> <li>- Difference of set</li> <li>- Shading regions</li> <li>- Complements of sets</li> </ul>	-	<ul style="list-style-type: none"> <li>- Finds difference of sets</li> <li>- Shades regions</li> <li>- Finds complements of sets</li> </ul>	- Do	- Do	- Do	Do	-
	4				<ul style="list-style-type: none"> <li>- Subsets</li> <li>- Listing and forming subsets</li> <li>- Finding number of subsets and proper subsets</li> </ul>	-	<ul style="list-style-type: none"> <li>- Lists subsets</li> <li>- Finds number of subsets</li> </ul>	- Do	- Do	- Do	Do	-
	5			Finding number of elements	<ul style="list-style-type: none"> <li>- Listing elements</li> <li>- Finding number of elements</li> <li>- Representing elements on the venn diagram</li> </ul>	<ul style="list-style-type: none"> <li>- Spells reads, pronounces and uses new words correctly</li> </ul>	<ul style="list-style-type: none"> <li>- Lists members</li> <li>- Finds number of elements</li> </ul>	- Real objects	- Mathematical ruler	- Logical reasoning	Mk old edition pp 20-22	-
	6			Application of set concepts	<ul style="list-style-type: none"> <li>- Representing elects on the venn diagram</li> <li>- Interpreting on the venn diagram</li> <li>- Finding number of elements</li> </ul>	-	<ul style="list-style-type: none"> <li>- Represents information on a venn diagram</li> <li>- Interprets information on the venn diagram</li> </ul>	<ul style="list-style-type: none"> <li>- Think</li> <li>- Pair</li> <li>- Share</li> </ul>	<ul style="list-style-type: none"> <li>- Clock faces</li> <li>- Mtc sets</li> <li>- Learners</li> <li>- Manila cards</li> <li>- Boxes</li> <li>- C.compases</li> <li>- Bottle tops</li> </ul>	-	Mk old edition 22-25	-

							- Finds number of members on the venn diagram					
	7				- Interpreting word problems - Representing information on the venn diagram - Solving for unknown	- Interprets , represents and solves for unknown on the venn diagram	-	-	-	-	Fountain 10-13	-
	8		Probability	- Identifying the sample spaces - Listing elements - Finding probability	- Spells, reads, Pronounces and uses the words correctly	- Lists, finds, identifies, and finds probability	-	- Do	-	-	Fountain pg 14-16 Mk new edition 10-12	-
<b>2</b>	1	<b>NUMERACY</b>	<b>Whole numbers</b>	Place and values	- Spells , reads , pronounces and uses the words correctly	- Finds the place values and values and uses operations.	-	-	-	-	Mk new edition 14-15 Fountain 20-23 Curriculum pg 152-154	-
	2			Expanded form	- Using values - Using place values - Using powers of tens and multiplies of ten - Finding expanded numerals.	-	- Expands numbers using place values , powers of ten	-	-	-	Fountain 23-24 Mk new edition 16-17	-
	3				- Scientific notation /standard notation	-	- Writes numbers in scientific notation	-	-	-		-
	4			Expressing expanded numbers as single numbers	- Expanded form of values, place values, exponents and multiples of ten	- Spells , read, pronounces and uses new words correctly	- Multiplies - Adds - Arranges values correctly	- Do	- Number cards - Real objects	- Do	Mk new edition 18-19 Mk old 38-39	-
	5			Writing numbers in words	- Finds place values - \writes numerals in words upto million	- Do	- Finds place values - Writes in words	- Do	- Do	- Do	Do	-
	6			Words in figures	- Identifies place values - Writes number words in figures - Arranges and adds values correctly	- Do	- Identifies place values - Finds the number - Arranges values	- Do	- Do	- Do	Mk old edition 47-48	-
	7			Rounding off	- Identifying required place values - Finding the nearest	- Do	Identifies nearest place values and requires place	- Do	- Do	- Do	Mk old edition 48 Understanding	-

				place values - Rounding off whole numbers		values Rounds off whole numbers				33-35	
	8		Decimal numbers	- Place values - Values	- Spells, reads, pronounces, and uses new words correctly	Finds place values And values of decimals	- Do	- Do	- Do	Mk old edition 42-44	-
<b>3</b>	1		Writing decimals in word sand figures	- Finding place value s - Writing in words - Writing in figures	- Do	Finds place values Writes decimals in words and figures	- Do	- Do	- Do	Mk old edition 45-46	-
	2		Expanded form of decimals	- Expanding using place values, values and powers of ten	- Do	Expands using values, place values and exponents	- Do	- Do	- Do		-
	3		Finding expanded decimals	- Multiplying , dividing, adding, arranging and finding expanded numbers	- Do	Multiplies, divides, adds, and finds expanded numerals	- Do	- D	- Do	Do	-
	4		Ordering decimals	- Ascending and descending - Finds LCM - Multiplying	- Reads, spells , pronounces and uses words correctly	Finds LCM Multiplies and arranges in order	- Do	- Do	- Do	Tr' collection	-
	5		Rounding off decimals	- One place decimal - Two place decimals - Three place decimals and whole numbers	- Do	Identifies place values and rounds off correctly	- Do	- Do	- Do	Mk old edition 48	-
	6		Roman numerals	- Expanding numbers - Writing Hindu to Roman numerals to 1000 - Writing roman to Hindu Arabic numerals	- Do	Expands Interprets and writes numerals to Hindu Arabic or roman numerals	- Do	- Do	- Do	Fountain 26-30	-
	7		Operation on Roman numerals	- Changing roman to hindu Arabic ans vice versa - Adding and subtracting	- Do	Changes to roman numerals or hind Arabic numerals Adds and subtracts	- Do	- Do	- Do	Mk old edition 50-51	-
	8		Bases	- Counting in base two and five - Naming non decimal base - Converting to non decimal bases	- Reads - Pronounces - Uses new words in sentences	Counts in base two and five Names non decimal bases Converts to non decimals bases	- Do	- Do	- Do	Tr's collection	-
				- Expanding - Identifying place values	- Do	Identifies place values and changes to base	- Do	- Do	- Do	Tr's collection	-

					- Changing to decimal base		ten					
<b>4</b>	1				- Addition of bases - Identifying place values - Regrouping	- Do	Regroups Identifies place values and adds in bases	- Do	- Do	- Do	Tr's collection	-
	2				- Subtracting bases - Regrouping - Identifying place values - Multiplying bases	- Do	Subtracts and multiplies	- Do	- Do	- Do	Tr's collection	-
	3		Finite system		- Grouping numbers n finite system - Dividing using finite - Adding using dial method - Multiplying in finite	- Spells , read, pronounces and uses new words correctly	Counts Groups Divides Multiplies And adds using finite system	- Do	- Do	- Do	Mk old edition 245-253	-
	4				- Regrouping using dial - Subtracting in finite system	- Do	Regroups and subtracts in finite system	- Do	- Do	- Do	Do	-
	5				- Solving equation in finite system - Dividing - Finding the unknown	- Do	Solves equation in finite system	- Do	- Do	- Do	Do	-
	6				- Application of finite - Interpreting days and mass in finite system - Finding past and future time in finite system	- Do	Interprets days and mass Finds past and future time	- Do	- D	- Do	Do	-
	7	<b>OPERATIONS ON WHOLE NUMBERS</b>	Addition of whole numbers		- Identifying place values - Arranging - Adding	- Spells, reads , pronounces and uses new words correctly	Identifies place values Arranges and adds whole numbers	- Cooperation - Effective communication - Creative thinking - Critical thinking - Problem solving	- Do	- Do	Understanding mtc 40-42	-
	8		Subtraction		- Identifying place values - Arranging - Subtracting	- Do	Identifies place values Arranges and subtracts whole numbers	- Do	- Do	- Do	Fountain 32-35	-
<b>5</b>	1		Multiplication		- Arranging according to place values - Regrouping - Multiplying	- Do	Arranges Regroups Multiplies	- Do	- Do	- Do	New mk edition 27 Fountain 33-34	-

	2			Division	<ul style="list-style-type: none"> <li>- Using long division</li> <li>- Regrouping</li> <li>- Multiplying</li> <li>- Subtracting</li> <li>- Dividing</li> </ul>	- Do	Divides	- Do	- Do	- Do	New mk 29-30	-
	3			Word problem	<ul style="list-style-type: none"> <li>- Interpreting statement</li> <li>- Writing mathematical statements</li> <li>- Dividing quantities</li> <li>-</li> </ul>	- Do	Interprets statements Writes mathematical statements Divides quantities	- D	- Do	- Do	Mk new 2-30 Fountain 37-38	-
	4			Mixed operation	- Using BODMAS	- Do	Interprets BODMAS correctly	- Do	- Do	- Do	New mk 37-32	-
	5			Properties of numbers	<ul style="list-style-type: none"> <li>- Commutative property</li> <li>- Distributive property</li> <li>- Associative property</li> </ul>	- Do	Uses the properties correctly	- Do	- Do	- Do	Fountain 38-39	-
	6		<b>Patterns and sequences</b>	Divisibility tests	<ul style="list-style-type: none"> <li>- Divisibility tests of 2, and 10</li> <li>- Divisibility of 3, 6, and 9</li> <li>- Divisibility of 4 and 8</li> </ul>	- Do	Finds numbers exactly divisible by 2, 5, 10, 3, 6, 9, and 4 and 8	- Do	- Do	- Do	New mk 34-36 Fountain 41-42	-
	7			Developing number patterns	<ul style="list-style-type: none"> <li>- Odd and even numbers</li> <li>- Triangular, square and whole numbers</li> <li>- Counting numbers</li> </ul>	- Do	Lists and completes number patterns	- Do	- Do	- Do	Fountain 43-48 Mk new 37	-
	8			Prime and composite numbers	<ul style="list-style-type: none"> <li>- Listing prime numbers</li> <li>- Composite numbers</li> </ul>	- Do	Lists and identifies composite and prime numbers	- Do	- Do	- Do	Old mk 77-78	-
<b>6</b>	1			Consecutive numbers	<ul style="list-style-type: none"> <li>- Natural numbers</li> <li>- Counting numbers</li> <li>- Integers</li> <li>- Forming equation</li> <li>- Solving equation</li> </ul>	- Do	Forms number patterns and equations Solves	- D	- Do	- D	Fountain 43-49	-
	2				<ul style="list-style-type: none"> <li>- Even numbers</li> <li>- Odd numbers</li> <li>- Forming and solving equations</li> <li>- Finding consecutive numbers</li> </ul>	- Do	Finds consecutive even and odd numbers	- Do	- Do	- Do	D	-
	3			Factors	<ul style="list-style-type: none"> <li>- Listing factors</li> <li>- Common factors</li> <li>- HCF, GCF</li> </ul>	- Do	Lists factors Identifies common factors Finds GCF	- Do	- Do	- Do	Mk old 82-83	-
	4			Prime factorization	<ul style="list-style-type: none"> <li>- Using multiplication</li> <li>- Subscripts</li> <li>- Powers</li> </ul>	- Do	Uses factor tree or ladder to prime factorise	- Do	- Do	- Do	Mk old 86	-

					- Factor tree - Ladder		Writes prime factors accordingly					
	5			Finding prime factorised numbers	- Multiplying - Interpreting powers and subscripts - Finding prime factorised numbers	- Do	Interprets factors and subscripts correctly Finds numbers correctly	- Do	- Do	- Do	Old mk 86	-
	6	<b>PATTERNS AND SEQUENCES</b>		Multiples of numbers	- Listing multiples c - Common multiples - LCM - Prime factorizing	- Do	Lists /finds LCM Prime factorises numbers	- Do	- Do	- Do	Old mk 86-87	-
	7			LCM and GCF	- Prime factorizing - Listing prime factors - Showing prime factors on the venn diagram - Finding LCM and GCF	- Do	Finds LCM and GCF using a venn diagram	- Do	- Do	- D	Do	-
	8			Prime factors on the venn diagram	- Finding the missing prime factors - Finding the HCF and the LCM	- Do	Finds unknown factors Finds GCF and LCM	- D	- Do	- Do	Mk old 88-89	-
<b>7</b>	1			Application of GCF and LCM	- Relationship between GCF and LCM - Multiplying numbers	- Do	Multiplies Finds unknown numbers Applies LCM and GCF	- D	- Do	- Do	Mk old 85	-
	2			Application of LCM	- Prime factorizing - Multiplying intervals - Finding common numbers	- Do	Prime factorise Multiplies Finds LCM Applies LCM	- Do	- Do	- Do	Do	-
	3			Powers of whole numbers	- Finding number of powers - Expressing number of powers - Operation of powers	- Do	Interprets powers Expresses number of as powers	- Do	- Do	- Do	Tr's collection	
	4			Square of numbers	- Squares of - Whole numbers - Fractions - Mixed numbers - Decimals	- Do	Finds squares	- Do	- Do	- Do	Mk old 39-40	
	5			Square roots	- Prime factorizing - Writing prime factors - Finding square roots	- Do	Prime factoisies Writes prime factors In multiplication form Finds square roots	- Do	- Do	- Do	New mk 39 Tr's collection	

	6			Square roots of fraction	<ul style="list-style-type: none"> <li>- Finding prime factors</li> <li>- Changing decimal to common fraction</li> <li>- Mixed to common fraction</li> <li>- Finds square roots</li> </ul>	- Do	Do	- Do	- Do	- Do	Tr's collection	
	7			Application of square roots	<ul style="list-style-type: none"> <li>- Forming equations</li> <li>- Prime factorizing</li> <li>- Finding square roots</li> </ul>	- Do	Forms equation Prime factorise Uses square roots	- Do	- D	- Do	Tr's collection	
	8			Cube and cube roots	<ul style="list-style-type: none"> <li>- Finding cubes</li> <li>- Forming equations</li> <li>- Finding cube roots</li> </ul>	- Do	Finds cubes and cube roots	- Do	- Do	- Do	Fountain 49	
<b>8</b>	1			Sequences	<ul style="list-style-type: none"> <li>- Identifying types of number</li> <li>- Finding number patterns</li> <li>- Completing sequence</li> </ul>	- Do	Identifies types of numbers Finds pattern numbers Completes the sequences	- Do	- Do	- Do	Do	
	2			Puzzle and magic square	<ul style="list-style-type: none"> <li>- Forms puzzles</li> <li>- Finding magic sum</li> <li>- Completing magic squares</li> </ul>	- Do	Forms magic square Completes magic square	- Do	- Do	- Do	Understanding mtc 74	
<b>TERM II</b>												
<b>1</b>	1	<b>NUMERACY</b>	<b>Fraction</b>	Addition	<ul style="list-style-type: none"> <li>- With same denominators</li> <li>- Different denominators</li> <li>- Mixed numbers</li> </ul>	- Do	Adds fractions with same and different denominators	- Effective communication - Problem solving	- Do	- Do	Fountain 56-57 Understanding mtc 85	
	2			Subtraction	<ul style="list-style-type: none"> <li>- With same and different denominators</li> <li>- Mixed numbers</li> </ul>	- Do	Subtracts fractions correctly	- Do	- Do	- Do	Fountain 58-60	
	3			Addition and subtraction	<ul style="list-style-type: none"> <li>- Finding LCD</li> <li>- Adding and subtracting fraction</li> </ul>	- Do	Finds LCD Adds and subtracts fractions	- Do	- Do	- Do	Fountain 59	
	4			BODMAS	<ul style="list-style-type: none"> <li>- Interpreting operation correctly</li> <li>- Working out using MODMAS</li> </ul>	- Do	Uses BODMAS to work out fractions	- Do	- Do	- Do	Do	
	5			Multiplication	<ul style="list-style-type: none"> <li>- Whole numbers by fraction and vice versa</li> <li>- Fraction by fraction</li> </ul>	- Do	Multiplies fraction correctly	- Do	- Do	- Do	Fountain 60-61	
	6			Division	<ul style="list-style-type: none"> <li>- Using LCM</li> <li>- Using reciprocal</li> <li>- Dividing fraction</li> </ul>	- Do	Finds reciprocals and divides fractions	- D	- Do	- Do	New mk 46-47	

	7				<ul style="list-style-type: none"> <li>- Fraction by whole numbers and vice versa</li> <li>- Fraction by fraction</li> <li>- Mixed by mixed fraction</li> </ul>	- Do	Divides fractions using LCM and reciprocal	- Do	- Do	- Do	New mk 49-50	
	8			Mixed operations	<ul style="list-style-type: none"> <li>- Applying BODMAS</li> <li>- Simplifying fractions</li> </ul>	- Do	Uses BODMAS and simplifies fraction correctly	- Do	- Do	- Do	Fountain 62-64	
<b>2</b>	1			Decimals	<ul style="list-style-type: none"> <li>- Adding decimals</li> <li>- Adding and subtracting decimals</li> </ul>	- Do	Adds and subtracts decimals correctly	Do	- Do	- Do	Old mk 14	
	2				<ul style="list-style-type: none"> <li>- BODMAS on decimals</li> <li>- Adding and subtracting</li> </ul>	-	Do		-	-		
	3			Multiplication	<ul style="list-style-type: none"> <li>- Decimal by whole numbers and vice versa</li> <li>- Decimal by decimal</li> </ul>	- Do	Multiplies writes decimals correctly	Do	- Do	- Do	O;dmk 116-118	
	4			Division	<ul style="list-style-type: none"> <li>- Changing to common fraction</li> <li>- Finding reciprocal</li> <li>- Dividing decimals</li> <li>- Simplifying</li> </ul>	- Do	Changes Simplifies Decimals	Do	- Do	- Do	Fountain 72	
	5			Operation on decimals	<ul style="list-style-type: none"> <li>- Changing to common fraction</li> <li>- Introducing brackets</li> <li>- Adding or subtracting</li> <li>- Simplifying decimals</li> </ul>	- Do	Workouts decimals with mixed operations	Do	- Do	- Do	New mk 61-65	
	6			Word problem	<ul style="list-style-type: none"> <li>- Interpreting word problems</li> <li>- Multiplying and dividing decimals</li> </ul>	- Do	Interprets and works out word problems	Do	- Do	- Do	Fountain 73-74	
	7		<b>Ratios and proportions</b>	Ratios	<ul style="list-style-type: none"> <li>- Forming ratios</li> <li>- Expressing ratios as fractions</li> <li>- Fractions as ratios</li> </ul>	- Do	Forms ratios correctly	Do	- Do	- Do	Ne mk 66-67	
	8				<ul style="list-style-type: none"> <li>- Quantities as ratios</li> <li>- Ratios as fraction and vice versa</li> </ul>	- Do	Writes ratios correctly	Do	- Do	- Do	Fountain 77-78	
<b>3</b>	1			Sharing in ratios	<ul style="list-style-type: none"> <li>- Finding total parts</li> <li>- Finding shares</li> </ul>	- Do	Finds shares of different parts	Do	- Do	- Do	Fountain 80-81	
	2			Finding shared quantity	<ul style="list-style-type: none"> <li>- Finding total share</li> <li>- Finding equivalent of shares</li> <li>- Finding the shared quantity</li> </ul>	- Do	Finds the quantity shared	Do	- Do	- Do	Old mk 133-135	



	3			Increasing and decreasing quantities	<ul style="list-style-type: none"> <li>- Finding fraction of increase and decrease</li> <li>- Finding quantity of decrease and increase</li> </ul>	- Do	Increases and decrease quantities correctly	Do	- Do	- Do	Old mk 12-130	
	4			Ratio of increase and decrease	<ul style="list-style-type: none"> <li>- Expressing quantities as fraction</li> <li>- Simplifying fractions</li> <li>- Writing ratios in simplest form</li> </ul>	- Do	Writes quantities as ratios in simplest form	Do	- Do	- Do	Fountain 79-80	
	5			Application of ratios	<ul style="list-style-type: none"> <li>- Applying ratios in solving daily life situations</li> </ul>	- Do	Shares quantities using the given ratios	Do	- Do	- Do	Fountain 82-83	
	6			Proportions	<ul style="list-style-type: none"> <li>- Direct proportion</li> <li>- Constant proportion</li> </ul>	- Do	Applies direction proportion and constant proportion	Do	- Do	- Do	Fountain 82-83	
	7				<ul style="list-style-type: none"> <li>- Indirect and inverse proportion</li> </ul>	- Do	Interprets and applies indirect proportion	Do	- Do	- Do	Old mk 71	
	8			Percentages	<ul style="list-style-type: none"> <li>- Meaning of %ages</li> <li>- %age as fraction</li> <li>- Fractions as %ages</li> </ul>	- Do	Changes %ages to fractions and vice versa	Do	- Do	- Do	Understanding mtc 113	
<b>4</b>	1			Decimal as %ages	<ul style="list-style-type: none"> <li>- Decimals as %ages</li> <li>- %ages as decimals</li> <li>- Ratios as fractions</li> </ul>	- Do	Converts decimals to %ages Converts ratios as fraction	Do	- Do	- Do	Do	
	2			Parts of %ages	<ul style="list-style-type: none"> <li>- Finding parts</li> <li>- Forming equations</li> <li>- Solving equations</li> </ul>	- Do	Finds, forms and solves equations	Do	- Do	- Do	Understanding mtc 115-116	
	3			Quantities as %ages	<ul style="list-style-type: none"> <li>- Finding quantities as %age</li> <li>- Finding %ages as quantities involving conversion</li> </ul>	- Do	Finds equivalent to %age Converts units	Do	- Do	- Do	Old mk 145	
	4			Quantities as %age of others	<ul style="list-style-type: none"> <li>- Changing to other units</li> <li>- Finding the %age equivalent</li> </ul>	- Do	Changes units and finds %ages	Do	- Do	- Do	New mk 75-77	
	5			Sharing in %ages	<ul style="list-style-type: none"> <li>- Changing %ages to fraction</li> <li>- Multiplying %age by quantity</li> </ul>	- Do	Changes %age to fraction Shares quantities	Do	- Do	- Do	Old mk 150	
	6			Algebra on %age	<ul style="list-style-type: none"> <li>- Forming equation</li> <li>- Changing %age to fraction</li> <li>- Finding the number shared</li> </ul>	- Do	Forms and solves equations	Do	- Do	- Do	old mk 152-153	

	7			%age increase and decrease	<ul style="list-style-type: none"> <li>- Increasing</li> <li>- Decreasing and finding discount</li> <li>- Using %ages</li> <li>- Finding quantity of decrease and increase</li> </ul>	- Do	Increase S and decreases quantity correctly	Do	- Do	- Do	Fountain 85	
	8			Finding %age decrease and increase	<ul style="list-style-type: none"> <li>- Finding quantity of increase and decrease</li> <li>- Finding %age increase and decrease</li> </ul>	- Do	Finds %age increase and decrease	Do	- Do	- Do	Fountain 86-87	
<b>5</b>	1			%age profit and loss	<ul style="list-style-type: none"> <li>- Finding profit</li> <li>- Finding loss</li> <li>- Calculating %age profit and loss</li> </ul>	- Do	Finds profit , loss and their %ages	Do	- Do	- Do	Do	
	2			Simple interest	<ul style="list-style-type: none"> <li>- Identifying principal rate and time</li> <li>- Finding simple interest</li> <li>- Finding amount</li> </ul>	- Do	Identifies and calculates simple interest	Do	- Do	- Do	Fountain 88 New mk 83	
	3	<b>Interpretation of graphs and data handling</b>	<b>Data handling</b>	Collecting and organization data	<ul style="list-style-type: none"> <li>- Collecting and recording data</li> <li>- Grouping data</li> <li>- Tabulating data</li> <li>- Drawing a bar graph</li> </ul>	- Do	Collects , records, tabulate and draws a bar graph	<ul style="list-style-type: none"> <li>- Critical thinking</li> <li>- Effective communication</li> <li>- Cooperation</li> <li>- Problem solving</li> </ul>	- Do	- Do	New mk 85-86 Fountain 92	
	4			Line graphs	<ul style="list-style-type: none"> <li>- Drawing line graphs</li> <li>- Interpreting line graphs</li> <li>- Finding scale</li> </ul>	- Do	Interprets , draws, and finds scale	Do	- Do	- Do	Fountain 102 Old mk 167-168	
	5			Mode, median, mean, range	<ul style="list-style-type: none"> <li>- Finding the mode, median, range and mean</li> </ul>	- Do	Finds mode, median, range and mean	Do	- Do	- Do	Do	
	6			Grouped data	<ul style="list-style-type: none"> <li>- Drawing frequency table</li> <li>- Interpreting grouped data</li> <li>- Finding mean, mode, median using grouped data</li> </ul>	- Do	Draws interprets frequency tables	Do	- Do	- Do	Tr's collection Old mk 172-173	
	7			Application of mean	<ul style="list-style-type: none"> <li>- Forms equations</li> <li>- Collects like terms</li> <li>- Finds unknown using mean</li> </ul>	- Do	Forms and solves equations using mean	Do	- Do	- Dod	Do	

	8				<ul style="list-style-type: none"> <li>- Inverse problem on average</li> <li>- Finding totals</li> </ul>	- Do	Finds total using average	Do	- Do	- Do	Do	
<b>6</b>	1			Pie charts	<ul style="list-style-type: none"> <li>- Drawing pie charts</li> <li>- Interpreting and completing sectors</li> </ul>	- Do	Draws Interprets and completes pie charts correctly	Do	- Do	- Do	New mk 94-97	
	2				<ul style="list-style-type: none"> <li>- Drawing pie charts</li> <li>- Interpreting pie charts with %ages</li> <li>- Finding unknown sectors</li> </ul>	- Do	Draws , finds unknown sector on a pie chart	Do	- Do	- Do	Fountain 93-97	
	3				<ul style="list-style-type: none"> <li>- Finding unknown values on the pie chart</li> <li>- Form an equation using the equivalent values</li> </ul>	- Do	Identifies equivalence and completes the pie chart	Do	- Do	- Do	Tr's collection	
	4			Drawing pie chart	<ul style="list-style-type: none"> <li>- Changing fractions to degrees</li> <li>- Changing %ages to degrees</li> <li>- Drawing accurate pie chart</li> </ul>	- Do	Draws pie chart using degrees	Do	- Do	- Do	New mk 99	
	5			More about pie charts	<ul style="list-style-type: none"> <li>- Finding total quantity</li> <li>- Changing quantities to degrees</li> <li>- Drawing accurate pie chart</li> </ul>	- Do	Do	Do	- Do	- Do	Old mk 184-188	
	6			Coordinate graph	<ul style="list-style-type: none"> <li>- Plotting</li> <li>- Joining</li> <li>- Naming shape</li> <li>- Finding area</li> <li>- And perimeter</li> </ul>	- Do	Plots, names, shapes, and finds area and perimeter	Do	- Do	- Do	Do	
	7			Money	<ul style="list-style-type: none"> <li>- Identifying different currencies</li> <li>- Finding number of notes</li> <li>- Finding the amount equivalent to the denomination</li> </ul>	- Do	Identifying currencies Finds number of bank notes	Do	- Do	- Do	Doldmk 217-218	
<b>7</b>	3	<b>Distance , time and speed</b>		Local and foreign currencies	<ul style="list-style-type: none"> <li>- Converting local currency to foreign currency</li> <li>- Drawing and use of forex rate table</li> </ul>	- Do	Converts local currency to foreign currency and vice versa	<ul style="list-style-type: none"> <li>- Effective communication</li> <li>- Interpersonal relationship</li> <li>- Problem solving</li> <li>- Decision</li> </ul>	- Do	- Do	Fountain 117 Understanding mtc 180-181	

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	2		<b>Time</b>	Conversion of time	- 12 hr clock to 24 hr clock - 24 hr clock to 12 hr clock	- Do	Converts time in 24 hr clock and 12 hr clock	Do	- Do	- Do	Tr's collection	
	3			Finding duration	- Converting to 24 hr clock - Finding duration in hrs and minutes	- Do	Converts to 24 hr clock Finds duration in hrs and minutes	Do	- Do	- Do	Olmk 224-225	
	4			Distance	- Finding distance with hours, minutes and km/hr on duration	- Do	Finds distance in conjunction with minutes and hours	Do	- Do	- Do	New mk 112	
	5			Time	- Finding time in hrs using speed and distance	- Do	Finds time using speed and time	Do	- Do	- Do	Understanding mtc 121-128	
	6			Speed	- Finding speed using time in hours and minute s - Finding speed in km/hrs	- Do	Finds speed using time in minutes and hours	Do	- Do	- Do	New mk 114-116	
	7				- Expressing km to m - Hours to seconds - Finding speed in m/sec	- Do	Converts km/hr to m/sec Finds speed in m/sec	Do	- Do	- Do	Old mk 237-238	
	8				- Converting m to km - Changes sec to hours - Converting m/sec to km/hr	- Do	Converts m to km, sec to hrs and m/sec to km/hr	Do	- Do	- Do	Do	
<b>8</b>	1			Average speed	- Finding total distance covered - Finding total time - Finding average speed	- Do	Finds distance, time, and average speed	Do	- Do	- Do	Old mk 235 Understanding 190-191	
	2			Travel graph	- Drawing travel graph - Finding scales - Completing travel graph - Showing movement on the travel graph - Finding average speed	- Do	Draws and finds scale Finding average speed	Do	- Do	- Do	New mk 115-120	
<b>P.6 MTC SCHEME TERM III</b>												
<b>1</b>	1		<b>Length, mass and capacity</b>	Conversion of metric units	- Km to m - M to cm - Cm to mm - Km to cm - Dm to cm	- Do	Converts metric unites correctly	Do	- Do	- Do	Old mk 313-315	

	2				<ul style="list-style-type: none"> <li>- M to km</li> <li>- Cm to m</li> <li>- Mm to cm</li> <li>- Cm to km</li> <li>- Cm to dm</li> </ul>	- Do	Do	Do	- Do	- Do	Do	
	3			Perimeter	<ul style="list-style-type: none"> <li>- Finding missing sides</li> <li>- Identifying shapes</li> <li>- Calculating perimeter</li> </ul>	- Do	Identifies shapes and finds perimeter	Do	- Do	- Do	Old mk 320	
	4			Area	<ul style="list-style-type: none"> <li>- Identifies shapes</li> <li>- Finding area of a square</li> <li>- Finding sides of a square using area</li> <li>- Using area of a square to find perimeter</li> </ul>	- Do	Finds area and perimeter of a square	Do	- Do	- Do	New mk 125	
	5				<ul style="list-style-type: none"> <li>- Finding area of a rectangle</li> <li>- Finding length and width using area</li> <li>- Using perimeter to find area</li> </ul>	- Do	Finds area of a rectangle side	Do	- Do	- Do	New mk 122-123	
	6			Area and perimeter	<ul style="list-style-type: none"> <li>- Identifying equal signs</li> <li>- Finding unknown</li> <li>- Finding length and width</li> <li>- Calculating perimeter and area of a rectangle and square</li> </ul>	- Do	Forms and finds unknown length Finds perimeter and area	Do	- Do	- Do	New mk 123-125 Old mk 334	
	7			Difference of area	<ul style="list-style-type: none"> <li>- Finding area of inner and outer shapes</li> <li>- Finding shaded or unshaded regions</li> </ul>	- Do	Finds area of inner and outer shapes Finds shaded and unshaded regions	Do	- Do	- Do	Old mk 336-337	
	8			Triangles	<ul style="list-style-type: none"> <li>- Finding area of a triangle</li> <li>- Finding base or height of a triangle</li> </ul>	- Do	Finds area, base or height	Do	- Do	- Do	Understanding mtc 267-263 Fountain 135-136	
<b>2</b>	1			Comparing area	<ul style="list-style-type: none"> <li>- Identifying base and height of triangles</li> <li>- Finding base or height using area</li> </ul>	- Do	Identifies base and heights of triangles, Finds base or height	Do	- Do	- Do	Olfmk 342	
	2			Combined figures	<ul style="list-style-type: none"> <li>- Finding area of separate figures</li> <li>- Calculating area of combined figures</li> </ul>	- Do	Finds area of combined figures correctly	Do	- Do	- Do	Understanding mtc 258 Old mk 343	

	3			Trapezium	<ul style="list-style-type: none"> <li>- Types of trapezium</li> <li>- Properties</li> <li>- Finding sides of a trapezium</li> <li>- Finding sides of a trapezium using area</li> </ul>	- Do	Names types of trapezium Finds area and types of trapezium	Do	- Do	- Do	New mk 128 Old mk 344-346	
	4			Parallelogram	<ul style="list-style-type: none"> <li>- Finding area</li> <li>- Finding base and height using area</li> </ul>	- Do	Finds area and sides of a parallelogram	Do	- Do	- Do	New mk 129 Old mk 347	
	5			Rhombus and kite	<ul style="list-style-type: none"> <li>- Stating properties</li> <li>- Finding area of a kite</li> <li>- Calculating</li> </ul>	- Do	States properties and calculates area	Do	- Do	- Do	New mk 130	
	6		<b>Circle</b>	Circumference	<ul style="list-style-type: none"> <li>- Finding radius and diameter</li> <li>- Identifying pie</li> <li>- Calculating circumference</li> </ul>	- Do	Names parts of a circle and finds circumference	Do	- Do	- Do	New mk 133	
	7			Perimeter and circumference of sectors	<ul style="list-style-type: none"> <li>- Identifying radius and diameter</li> <li>- Finding circumference</li> <li>- Calculating perimeter</li> </ul>	- Do	Identifies radius and diameter Finds circumference and perimeter of sectors	Do	- Do	- Do	Do	
	8			Area	<ul style="list-style-type: none"> <li>- Identifying radius</li> <li>- Finding area using <math>22/7</math> or <math>3.14</math></li> <li>- Finding area of some sectors</li> </ul>	- Do	Identifies radius and finds area of circles and some sectors	Do	- Do	- Do	DI	
<b>3</b>	1			TOTAL surface area	<ul style="list-style-type: none"> <li>- Identifying prisms</li> <li>- Calculating TSA</li> </ul>	- Do	Identifies prisms and finds the total surface area	Do	- Do	- Do	Old mk 348-351	
	2			Sides of a cube and cuboid	<ul style="list-style-type: none"> <li>- Forming equations using TSA</li> <li>- Applying TSA to find sides and volume</li> </ul>	- Do	Uses TSA to find sides and volume of cubes and cuboid	Do	- Do	- Do	New mk 137	
	3			Cylinder	<ul style="list-style-type: none"> <li>- Naming parts</li> <li>- Identifying radius</li> <li>- Finding volume using base area and height</li> </ul>	- Do	Names, identifies and finds volume	Do	- Do	- Do	Old mk 356-360	
	4			Capacity	<ul style="list-style-type: none"> <li>- Finding volume</li> <li>- Finding capacity using volume</li> </ul>	- Do	Finds volume and capacity	Do	- Do	- Do	Fountain 139-141	
	5			Application of volume and capacity	<ul style="list-style-type: none"> <li>- Changing capacity to volume</li> <li>- Using volume to find sides</li> <li>- Calculating capacity</li> </ul>	- Do	Changes capacity to volume Uses volume to find sides Calculates capacity	Do	- Do	- Do	Old mk 359-360	

	6			Capacity	<ul style="list-style-type: none"> <li>- Litres to ml</li> <li>- L to <math>\text{cm}^3</math></li> <li>- ml to l</li> <li>- <math>\text{cm}^3</math> to l</li> </ul>	- Do	Changes litres to milliliters Litres to $\text{cm}^3$ and vice versa	Do	- Do	- Do	Old mk 360-364	
	7	<b>Lines, angles and geometrical figures</b>	<b>Geometry</b>	Shapes and lines	<ul style="list-style-type: none"> <li>- Types of lines</li> <li>- Drawing and measuring lines segments</li> <li>- Drawing parallel lines</li> <li>- Constructing perpendicular lines</li> </ul>	- Do	Draws , measures lines Constructs lines	Do	- Do	- Do	Fountain 152-153	
	8			Angles	<ul style="list-style-type: none"> <li>- Drawing and forming angles</li> <li>- Measuring angles using different scales on a protractor.</li> </ul>	- Do	Draws, forms and measures angles	Do	- Do	- Do	Fountain 147-151 new mk 147-149	
<b>4</b>	1			Bisection of angles	<ul style="list-style-type: none"> <li>- Bisecting lines at a point</li> <li>- Dropping bisectors</li> <li>- Bisecting given angles</li> </ul>	- Do	Bisects and draw lines	Do	- Do	- Do	Fountain 147-151	
	2			Constructing angles	<ul style="list-style-type: none"> <li>- Drawing lines</li> <li>- Constructing ARCs</li> <li>- Showing angles</li> <li>- Constructing angles of <math>30^\circ</math>, <math>45^\circ</math>, <math>60^\circ</math>, <math>90^\circ</math></li> </ul>	- Do	Draws, constructs angles	Do	- Do	- Do	New mk 147-149 Old mk 288-291	
	3			Constructing polygons	<ul style="list-style-type: none"> <li>- Types of triangles</li> <li>- Drawing sketch</li> <li>- Drawing lines</li> <li>- Measuring lengths</li> <li>- Constructing triangles with SSS</li> </ul>	- Do	Draws, sketch lines and triangles	Do	- Do	- Do	Understanding mtc 237	
	4			Constructing triangles	<ul style="list-style-type: none"> <li>- Drawing sketch</li> <li>- Drawing and measuring sides</li> <li>- Constructing angles</li> <li>- Constructing a triangle with SAS, SSA and ASS</li> </ul>	- Do	Draws, measures lines and angles	Do	- Do	- Do	Understanding mtc 230-231	
	5				<ul style="list-style-type: none"> <li>- Drawing sketch</li> <li>- Measuring one side</li> <li>- Constructing two angles</li> <li>- Constructing a triangle with AAS</li> </ul>	- Do	Measures and constructs triangles	Do	- Do	- Do	Do	
	6			Constructing quadrilaterals	<ul style="list-style-type: none"> <li>- Square, rectangle</li> <li>- State properties</li> <li>- Find the diagonals</li> </ul>	- Do	Constructs a square , rectangle and state the properties	Do	- Do	- Do	Tr's collection	

	7				<ul style="list-style-type: none"> <li>- Hexagon , octagon and pentagon</li> <li>- Finding centre angel</li> <li>- Finding perimeter</li> </ul>	- Do	Constructs, hexagon, pentagon, and octagon correctly	D	Do	- Do	Fountain 155-156 New mk 165	
	8			Properties of polygons	<ul style="list-style-type: none"> <li>- Equilateral triangles</li> <li>- Isosceles triangles</li> <li>- Scalene triangles</li> <li>- Right angled triangles</li> <li>- Square, parallelogram</li> <li>- Trapezium and kite</li> </ul>	- Do	States properties of polygons	Do	Do	- Do	Tr's collection	
<b>5</b>	1			Pythagoras theorem	<ul style="list-style-type: none"> <li>- Proving Pythagoras theorem</li> <li>- Finding hypotones height and base using Pythagoras theorem</li> </ul>	- Do	Applies piethogorus theorem correctly	Do	Do	- Do	Fountain 157 Old mk 299-300	
	2			Application of pythagorus theorem	<ul style="list-style-type: none"> <li>- Finding equal sides of isosceles triangle</li> <li>- Substituting</li> <li>- Fidning the base , height and hypotunes</li> <li>- Calculating area and perimeter</li> </ul>	- D	Finds sides of an isosceles Finds its base , height and hypotunes	Do	Do	- Do	Tr's collection	
	3			Types of angles	<ul style="list-style-type: none"> <li>- Right angels</li> <li>- Acute , reflex and centre</li> <li>- Supplementary and complementary angles</li> </ul>	- Do	Identifies and finds complements and supplements of angles	Do	D	- Do	Fountain 146	
	4			Supplementary angels	<ul style="list-style-type: none"> <li>- Unknown supplementary angles</li> <li>- Forming equations</li> <li>- Angels in the triangle</li> <li>- Finding supplements</li> </ul>	- Do	Finds supplements of angles	Do	Do	- Do	New mk 144	
	5			Angels on parallel lines	<ul style="list-style-type: none"> <li>- Drawing parallel lines in sketch form</li> <li>- Drawing transversal line</li> <li>- Co-interior angels</li> <li>- Co-exterior angels</li> </ul>	- Do	Draws parallel lines, Identifies co-interior angels and co exterior angels	Do	Do	- Do	Old mk 267-273	
	6				<ul style="list-style-type: none"> <li>- Alternate interior angles</li> <li>- Alternate exterior angles</li> <li>- Corresponding angles</li> <li>- Vertically opposite</li> </ul>	- Do	Identifies the angle properties on parallel lines	Do	Do	- Do	Tr's collection	



					angles							
	7			Angle properties	<ul style="list-style-type: none"> <li>- Equilateral triangle</li> <li>- Isosceles triangle</li> <li>- The sum of two interior angles is equal to its opposite exterior angles</li> </ul>	- Do	Applies the angle properties on triangles	Do	Do	- Do	Tr's collection	
<b>6</b>	1		<b>Integers</b>	Number line	<ul style="list-style-type: none"> <li>- Additive inverse</li> <li>- Naming arrows</li> <li>- Drawing arrow</li> <li>- Drawing a number line</li> <li>- Finding inverse</li> </ul>	- Do	Draw, names and finds additive inverse	Do	Do	- Do	Old mk 197-198	
	2			Ordering integers	<ul style="list-style-type: none"> <li>- Comparing integers</li> <li>- Ascending order</li> <li>- Descending order</li> </ul>	- Do	Compares and arranges integers	Do	Do	- Do	New mk 168-167	
	3			Addition	<ul style="list-style-type: none"> <li>- Positive to a positive</li> <li>- Positive to a negative</li> <li>- Negative to a negative</li> <li>- Negative to a positive</li> <li>- Using a number line</li> </ul>	- Do	Adds integers with or without a number line	Do	Do	- Do	Tr' collection	
	4			Subtraction	<ul style="list-style-type: none"> <li>- Positive from a positive</li> <li>- Positive from a negative</li> <li>- Negative from a negative</li> <li>- Negative from a positive</li> <li>- Using a number line</li> </ul>	- Do	Subtracts integers with or without number line	Do	Do	- Do	Tr's collection	
	5			Multiplication	<ul style="list-style-type: none"> <li>- Finding groups</li> <li>- Showing groups on a number line</li> <li>- Multiplying integers with or without a number line</li> </ul>	- Do	Multiplies integers correctly	Do	Do	- Do	Old mk 205	
	6			Solution sets	<ul style="list-style-type: none"> <li>- Drawing a number line</li> <li>- Interpreting set of integers</li> <li>- Showing set of integers on a number line</li> <li>- Finding solution sets</li> </ul>	- Do	Finds the solution set	Do	Do	- Do	Old mk 207-210	
	7			Inequalities	<ul style="list-style-type: none"> <li>- Solving inequalities</li> <li>- Showing on a number line</li> <li>- Finding the solution</li> </ul>	- Do	Solves and finds solution sets correctly	Do	Do	- Do	Do	

<b>7</b>	1	<b>ALGEBRA</b>	<b>Algebra</b>	Algebraic expression	<ul style="list-style-type: none"> <li>- Writing phrase</li> <li>- Adding , subtracting , multiplying , dividing and use f brackets</li> </ul>	- Do	Uses different operations to write algebraic expression	Do	Do	- Do	Fountain 187 Old mk 374-375	
	2			Substitution	<ul style="list-style-type: none"> <li>- Expanding algebraic expression</li> <li>- Substituting</li> <li>- Finding values</li> </ul>	- Do	Expands, substitute and finds values	Do	D	- Do	New mk 180-183	
	3			Like terms	<ul style="list-style-type: none"> <li>- Collecting like terms</li> <li>- Simplifying like terms</li> <li>- Applying perimeter</li> <li>- Finding perimeter</li> </ul>	- Do	Collects and simplifies like terms	Do	Do	- Do	Do	
	4			Removing brackets	<ul style="list-style-type: none"> <li>- Multiplying</li> <li>- Substituting</li> <li>- Simplifying</li> <li>- Finding values of unknown</li> </ul>	- Do	Removes brackets Substitutes and simplifies	Do	Do	- Do	Fountain 188-189	
	5			Forming equation	<ul style="list-style-type: none"> <li>- By adding</li> <li>- Subtracting and multiplying</li> </ul>	- Do	Forms different equations \solving equations	Do	Do	- Do	Ldmk 380-381	
	6			Solving equation by dividing	<ul style="list-style-type: none"> <li>- Forming equations</li> <li>- Collection like terms</li> <li>- Simplifying like terms</li> <li>- Finding unknown</li> <li>- Solving equation</li> </ul>	- Do	Forms, collects, simplifies and solves equation	Do	Do	- Do	New mk 184-185	
	7			Fractional equation	<ul style="list-style-type: none"> <li>- Collecting like terms</li> <li>- Finding LCD</li> <li>- Solving equation</li> <li>- Finding unknown</li> </ul>	- Do	Collects like terms And solves equations	Do	Do	- Do	New mk 186	
	8			Application of algebra	<ul style="list-style-type: none"> <li>- Using area of a square , rectangle, and triangle</li> <li>- Using perimeter of a square , rectangle and triangle</li> </ul>	- Do	Applies area and perimeter using algebra	Do	Do	- Do	New mk 188-189	
<b>8</b>	1			Equations with brackets	<ul style="list-style-type: none"> <li>- Removing brackets</li> <li>- Collecting like terms</li> <li>- Solving</li> <li>- Finding unknown</li> </ul>	- Do	Removes , collects and solves equation	Do	Do	- Do	New mk 199 Old mk 395-396	
	2			Application of algebra	<ul style="list-style-type: none"> <li>- Identifying properties of polygon</li> <li>- Forming equation</li> <li>- Solving equation</li> <li>- Finding sides area and perimeter of polygon</li> </ul>	- Do	Forms, solves, and finds area of different polygons	Do	Do	- Do	Tr' collection	
Revision												

