Tekart learning P. 7 Mathematics Topical Breakdown

UNIT	ITEM	BREAKDOWN
1	**SET CONCEPTS**	▪ Review of universal, union, intersection, compliment, subset, difference of sets, empty set, equal, equivalent, joint and disjoint sets etc ▪ Use of venn diagrams to solve problems (two and three venn diagrams) ▪ Integrating probability with venn diagrams ▪ Finite and infinite sets
2	**NUMERATION SYSTEM AND PLACE VALUE**	▪ Review of P.6 work on place values ▪ Reading and writing numerals in words up to hundred million ▪ Reading and writing numerals from words to figures up to hundred million ▪ Expanding numerals – values; multiples to powers ▪ Writing expanded numbers in short form ▪ Standard form/scientific notation ▪ Rounding off whole numbers up to the nearest millions **Decimals** ▪ Place values and values of decimals up to millionths ▪ Reading and writing decimals in words up to millionths ▪ Reading and writing decimals from words to figures ▪ Expanding decimals using values and powers ▪ Writing expanded decimals in short form ▪ Writing decimals in standard /scientific notation ▪ Rounding off decimals up to the nearest hundred thousandths ▪ Review of number systems i.e. prime, natural, odd, even, composite, triangular, cube, integers, and rational numbers **Roman numerals** ▪ Reading and writing roman numerals up to MM ▪ Conversion from Hindu to Roman and vice versa ▪ Addition and subtraction of roman numerals ▪ Application of roman numerals **Bases** ▪ Addition, subtraction and multiplication up to 5 digits in non-decimal bases ▪ Conversion of non-decimal bases to decimal bases ▪ Conversion of non-decimal to non-decimal bases ▪ Finding the base used in addition and subtraction **Finite/ modulus system** ▪ Addition, subtraction, multiplication and division ▪ Algebra in finite system ▪ Application of finite system
3	**OPERATION ON**	▪ Addition up to 100,000,000

	NUMBERS	▪ Subtraction up to 100,000,000 ▪ Word problems on addition and subtraction of large numbers ▪ Multiplication and division of large numbers ▪ Word problems involving multiplication and division of large numbers **Indices** ▪ Laws of indices in multiplication and division ▪ Application of indices
4	**NUMBER PATTERNS AND SEQUENCES**	▪ Review of divisibility tests by 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 ▪ Number patterns - Composite numbers - Square numbers - Triangular numbers - Prime numbers - Odd, even numbers - Rectangular numbers - Multiples - Factors, LCM, HCF ▪ Application of number patterns – natural, odd, even numbers ▪ Square numbers and square roots of *whole numbers, fractions, mixed numbers, decimals* ▪ Application of square and cubic numbers
5	**FRACTIONS**	▪ Changing improper to mixed fractions and vice versa ▪ Changing fractions to decimal and vice versa ▪ Changing recurring decimals to rational numbers and vice versa ▪ Operations of fractions. Addition, subtraction, multiplication and division ▪ Use of BODMAS to simplify mixed fractions ▪ Word problems on fractions in addition, subtraction, multiplication and division ▪ Application of fractions in real life situation **Decimals** ▪ Addition of decimals up to ten thousandths ▪ Subtraction of decimals ▪ Word problems involving addition and subtraction of decimals ▪ Multiplication of decimals up to ten thousandths ▪ Division of decimals up to ten thousandths ▪ Combined operations (multiplication and division) ▪ Use of BODMAS in decimals ▪ Word problems involving multiplication and division of decimals **Ratios** ▪ Forming ratios ▪ Expressing ratios as fractions and vice versa ▪ Increasing and decreasing quantities in given ratios ▪ Finding the ratio of increase and decrease

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		▪ Sharing quantities in ratios ▪ Finding the ratio in which quantities are shared ▪ Finding the number shared in a given ratio ▪ Solving problems involving ratios **Proportion** ▪ Direct proportion ▪ Indirect proportion ▪ Compound proportion ▪ Constant proportion **Percentages** ▪ Changing percentages to decimals and vice versa ▪ Changing percentages to fractions and vice versa ▪ Changing percentages to ratios and vice versa ▪ Find the remaining percentage (parts of percentage) ▪ Expressing quantities as percentages ▪ Finding percentage parts of quantities ▪ Application of percentage parts (sharing quantities using percentages) ▪ Increasing quantities by percentage ▪ Percentage increase ▪ Decreasing quantities by percentage ▪ Percentage decrease ▪ Finding the original number after the %age increase ▪ Finding the original number after the %age decrease ▪ Profit ▪ Percentage profit ▪ Loss ▪ Percentage loss ▪ Percentage discount ▪ Finding cost price (original price) and profit ▪ Finding selling price from original price and profit ▪ Finding cost price/original price from selling price and loss ▪ Finding selling price from original price and loss ▪ Simple interest, principal, rate, time, and amount ▪ Commission and hire purchase ▪
6	**GRAPHS**	▪ Review of pictographs, bar graphs, line graphs ▪ Travel graphs - Interpreting travel graphs - Drawing travel graphs ▪ Co-ordinate graphs - Reading co-ordinates

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		- Plotting co-ordinates - Joining points - Naming figures formed - Area of figures formed ▪ Lines formed by ordered pairs ▪ Drawing lines for given ordered pairs ▪ Forming ordered pairs from given equations of the line and plotting to get the line and vice versa ▪ Pie charts ▪ Construction/drawing pie charts **Probability** ▪ Meaning of probability ▪ Telling probability of several situations ▪ Coin tossing ▪ Dice rolling ▪ Cartesian product of two coins or dice, coin and dice ▪ Consolidation of averages and range
7	**MEASURES**	**Metric system** ▪ Comparing metric units ▪ Conversion of metric units ▪ Addition and subtraction of metric units ▪ Multiplication and division of metric units ▪ Perimeter of triangles and quadrilaterals, combined figures and other polygons ▪ Circumference of a circle and parts of a circle ▪ Application of length, perimeter and circumference ▪ Area of triangles, quadrilaterals and circles and its parts ▪ Area of combined figures (shapes) ▪ Area of shaded and unshaded parts ▪ Comparing different areas ▪ Area of shaded and un shaded parts of triangles, quadrilaterals and circles ▪ Comparing areas ▪ Application of area ▪ Total surface area (cube, cuboid, triangular prism, trapezoidal prism, cylinders) ▪ Volume of cubes, cuboid, triangular prism, trapezoidal prism, cylinders ▪ Volume and capacity of cubes, cuboids and cylinders **Packing in a box** ▪ Cubes ▪ Cuboids ▪ Cylinders **Time** ▪ Changing seconds to minutes and hours and vice versa ▪ Recording time and time differences

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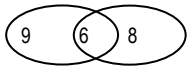
		▪ Conversion of 12-hour clock to 24-hour clock and vice versa ▪ Duration in 12-hour clock and 24-hour clock **Time table** - School time table - Taxi and bus time table - Train time table - Marine time table - Air time table - Television and radio programmes - Application of time tables ▪ Average speed, distance and time ▪ Conversion of speed in *km/hr* and *m/sec* **Money** ▪ Bills ▪ Currencies (exchange rates) ▪ Postal rates ▪ Telegrams
8	**GEOMETRY**	▪ Measuring lines ▪ Construction of lines ▪ Bisecting lines ▪ Parallel lines ▪ Properties of angles on parallel line ▪ Drawing and measuring of angles with the help of a protractor ▪ Construction of special angles 15^0, $22\frac{1}{2}^0$, 30^0, 45^0, 60^0, 75^0, 90^0, 120^0, 135^0, 150^0, etc ▪ Compliments/supplements ▪ Dropping a perpendicular and drawing perpendicular bisectors ▪ Construction of triangles – SSS, SAS, ASA ▪ Properties of triangles ▪ Circumscribing and inscribing triangles ▪ Construction and quadrilaterals – square, rectangle, rhombus, and parallelogram ▪ Construction of regular polygons using center angle – pentagon, hexagon ▪ Sum on interior angles ▪ Direction, bearing and scale drawing - Rotation /revolution - Angles between compass direction - Ordinary bearing (direction) - Opposite direction - True bearing - Opposite bearing - Scale drawing ▪ Calculations

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		- Properties of quadrilaterals - Angles of quadrilaterals - Properties of regular polygons - Exterior, interior angles, centre angles of polygons - Number of sides of polygons - Interior angle sum of polygons - Word problems involving the above ▪ Circle properties – angles around a point
9	**INTEGERS**	▪ Use of number lines to add , subtract and multiply integers ▪ Calculation without number line in addition, subtraction, division and multiplication ▪ Application of integers in daily life situations ▪ Inequalities and solution sets
10	**ALGEBRA**	▪ Forming algebraic expressions ▪ Collecting and simplifying the like terms ▪ Removing brackets ▪ Substitution ▪ Formation of equations ▪ Solving equations involving all operations ▪ Solving fractional equations ▪ Solving decimal equations ▪ Application of equations in real life situations ▪ Powers/ indices ▪ Operation on numbers with powers i.e. addition, subtraction, multiplication and division ▪ Index rule (use of multiplication and division) ▪ Application of powers/indices

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Tekart learning Mathematics Scheme of Work Primary Seven

WK	PD	TOPIC	SUB TOPIC	CONTENT	Subject competence	Language competence	Life skills	Method	t/l aids	Activity	REF	REM.
1	1	**SETS**	Revision on types of sets	- Describing sets - Listing elements - Disjoint, empty, intersection and union set	- A learner - Describes types of sets - Forms sets - Draw venn diagrams	- A learner - Describes different types of sets - Describes information on the venn diagram	- Critical thinking - Creative thinking - Effective communication - Problem solving	- Question and answer - Discussion - Explanation	- Wall charts - Showing venn diagrams	- Answering questions - Doing exercise	- New MK MTC bk 7 pg 1-2 - Mk NCDC 1-3 - Fountain pri MTC Bk 7 pg 1-4	-
	1		Sub sets	- Listing subsets - Finding number of subsets (both proper and improper -	- A learner - Defines a subset - Lists the subsets - Counts - Solves for number of subsets	- The learn defines subsets - Forms sentences using the word	- Dp	Do	-	- Forming subsets from a set	- New Mk bk 7 pg 2-4 - Mk NCDC 4-7 - Fountain mtc pg 3-6 , 8-10	-
	1		Use of venn diagrams	Interpreting two venn diagram The venn diagram shows the number of pupils who eat both apples (a) and beans (B) A B  a) How many pupils eat beans? b) How many pupils eat apples?	- Learners - Identifies the different regions - Names the different regions - Adds - Displays information on a venn diagram - Finds probability of simple sets	- The learner - Names regions - Defines probability	- Demonstration - Explanation - Guided discovery	Do	- Wall charts showing diagram of two intersecting sets	- Drawing - Identifying - Naming	-	-
	1	**SETS**	Solving problems involving venn diagram of 2 sets	- Drawing venn diagram to represent given information - Finding number of members	- Drawing venn diagram - Finds number of members in each set - Finds probability of simple sets	- The learner reads different regions on venn diagram	- Do	Do	- Wall chart showing venn diagram	- Drawing - Identifying - Naming	- New MK pg 10-11 - NCDC 11-12	-
2	1	**Whole numbers**	Place values and values	- Review of previous work on place values and values - Example - 2435087 - Place values and values of underlined digits Digit place value 5 thousand 5000 8 _____ _____	- The learner - Identifies place values - Finds values of digits	- The learner - Reads place values - Writes place values - Spells place values of digits	- Guided discovery - Explanation - Discussion		Abacus - Place values charts	- Answering questions - Reading - Writing - Identifying place values	- New MK pg 28 - NCDC 13 - Understanding MTC bk 7 - Pg 18 - Fountain mtc bk 7 pg 25-28 , 20-22	-

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			Reading and writing numerals in words	Reading given figures in words Writing given figures in words	The learner reads the given figures in words - Writes given figures	- The learner read and writes given figures in words	- Do	Do	- Do	- Writing - Reading - Answering oral questions	- Understanding mtc pg 19 - Fountain mtc bk 7 pg 27	-
2	1		Reading and writing words in figures	Writing from words to figures	- The learners - Write given words in figures	- The learner reads given words	- Do	Do	- Do	- Writing - Answering questions Mk -	- mtc pg 21 - Mk NCDC 15 - Understanding mtc bk 7 pg 18	-
	1		Expanded notation	Expanding numbers using; values, place values , powers of ten	- The learner - Expands numbers using; values, place values, powers of ten	- The learn spellings the word expand - Describes the relationship between numbers and their values	- Guided discovery - Explanation - Discussion	Do	- Wall chart showing examples of expanded numbers	- Expanding - Answering oral questions - Identifying place values	MK bk 7 pg 49 Mk NCDC 38 - Fountain pg 36	-
			Writing expanded numbers in short form	Finding expanded numbers	The learner Writes given expanded numbers in short form	- The learners - Describes relationships between numbers and their short forms	- Do	Do	-	- Finding expanded numbers - Adding	MK bk 7 pg 49 Mk NCDC 38 Fountain pg 28	-
			Standard form / scientific notation	Writing single numbers in scientific notation Finding the single numbers for the given numbers	The learner Writes single numbers in scientific notation Finds the	- The learner - Reads and writes numbers in scientific notation	- Explanation - Discussion	Wall charts showing numbers to standard form	- Do	- Writing numbers in scientific notation	- Fountain 45 - Mk NCDC 39 - MAcm 55-59	-
3	1		Rounding off whole numbers	Rounding off to the nearest Tens Hundreds Thousands Ten thousand Hundred thousand Million	- The learner rounds off to the nearest Tens Hundreds Thousands Ten thousand Hundred thousand Million	The learner spells and uses the words Tens Hundreds Thousands Ten thousand Hundred thousand - Million	- Explanation - Question and answer - Discussion	Wall chart showing examples of rounding off whole numbers	- Do	- Adding - Re-grouping	- New mk mtc bk 7 pg 30-51 - Understanding mtc pg 26-27 - Fountain 28-30	-
	1		Roman numerals	Reading and writing roman numerals Converting Hindu Arabic to roman numerals Converting roman numerals to Hindu Arabic Application of roman numerals	- The learner read and writes roman numerals - Converts Hindu Arabic to roman numerals - And vice versa - Adds roman numerals	- The learner - Describes roman numerals	- Do	Wall chart showing roman numerals	- Do	- Converting - Adding	- New mk bk 7 pg 23-39 - Mk NCDC 17-19 - Fountain 19-22	-
	1		Bases	Addition , subtraction , division and multiplication of bases Non decimal bases	- The leaner's adds, subtracts, divides, and multiples given bases - Finds missing bases	- The learner read and answers after adding	- Do	Abacus Real objects	- Do	- Converting from other bases to base ten and vise	- Old mk bk 7 pg 38-43 - Mk NDCD 22-30	-

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3				Finding missing bases		subtracting, dividing and multiplying bases				versa	- Fountain 30 - 42	
4	1	Operation on whole numbers	Addition and subtraction of large numbers	- Adding and subtracting large numbers up to 100,000,000	- The learner - Arranges digits according to place values - Adds - Subtracts	- The learner reads the mathematical statement of addition and subtraction	- Discussion - Explanation - Question and answer	Cooperation Critical thinking Effective communication Problem solving Creative thinking	- Chalkboard illustration	- Adding - Subtraction	- New mk bk 7 pg 46 - Mk NDCD 31 -	-
	1		Multiplication of large numbers	- Multiplying by two digits number - Multiplying by three digit numbers	- The learner ; - Multiples whole numbers whose product does not exceed 100,000,000 - Solves word problems involving multiplication	- The learner reads mathematical statement of multiplication	- Do	Do	- Chalkboard illustration	- Multiplying - Adding - Regrouping	- New mk bk 7 pg 46 - Mk NDCD 57-58 - Fountain 46	-
	1		Division of large numbers	Dividing large numbers by the digit numbers Dividing large numbers by three digit numbers	- The learner; - Divides whole numbers - Solves words problem involving division (quotient)	- The learner: - Read mathematical statements of division	- Do	Do	- Do	- Dividing - Subtraction	- New mk bk 7 pg 46 - Mk NDCD 58-59 - Fountain 47 - NCDC 33s	-
	1		Properties of numbers	Distributive property Associative property Commutative property Given that x*y Means ty+y	- The learner - Adds - Multiples - Factorises - Groups numbers - Subtracts	- The learner - Spells and uses the words distributive, associative and commutative	- Guided discovery - Question and answer	Do	- Read and counts	- Adding - Multiplying - Factoring - Subtracts	- New mk bk 7 pg 47 - Mk NDCD 34-36 - Fountain 76-78 - NCDC 33s	-
			Indices	Laws of indices in multiplication Application of indices with multiplication	- The leaner - Adds - Simplifies - Factorise - Solves	- The learner - Reads and uses the words - Powers - Indices - Exponents	- Do	Do	- Chalkboard illustration	- Adding - Simplifying	- New mk bk 7 pg 51 - Mk NDCD 34-36 - Fountain 63-64 -	-
5	1		Indices	Laws of indices in division Application of indices with division Squares and square roots	- The leaner; - Subtracts - Simplifies - Factorises - Solves	- Do	- Do	Do	- Do	- Subtraction - Simplifying - Factorizing	- New MK pg 51 - Mk NDCD 34-36 - Fountain 60-66 -	-
	1	Patterns and sequences	Divisibility test	- Review of divisibility test for 2, 3, 4, 5 and 6 - Divisibility test for 7	- The learner - Describes types of numbers - Identifies numbers divisible by 2,3,4,5,6, and 7	- The learner reads the word divisibility test - Describes steps for divisibility test	- Explanation - Discussion - Question and answer	Critical thinking Creative thinking Effective communication Problem solving	- Chalkboard illustration - -	- Dividing - Adding - Reading	- New MK pg 59 - Mk NDCD 34-36 - Fountain 59 - NCDC 43-46	-
	1		Divisibility tests	Divisibility test of 8, 9, 10,and 11	- The learners - Describes types of numbers - Identifies numbers divisible by 8, 9, 10,	- The learners - Describes steps for divisibility tests	- Do	Do	- Do	- Do	- New MK pg 51 - Mk NDCD 34-36 - Understating mtc 51-57	-

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					and 11						- NCDC 43-46	
5	1		Sets of numbers	Write numbers Natural /carrying numbers Even and odd numbers Prime numbers Composite numbers Triangular numbers Cubic and cube numbers Integers Rational numbers Square number s Application of LCM and GCF	- The learner - Lists types of numbers - Counts numbers - Identifies numbers and their sequence	- The learner - Spells and uses the words whole, natural , counting , even . odd and prime - Triangular, cube, integers and rational and square numbers	- Guided discovery - Explanation - Question and answer	Do	- Wall chart showing the types of numbers	- Completing sequence - Listing	- New MK pg 64-70 - Mk NDCD 47-53 - Fountain -	-
	1	Fraction	Improper and mixed fraction	Review changing improper fraction to mixed numbers and vise versa	- The learner - Converts improper fractions to mixed numbers - Converts mixed numbers to improper fractions	- The learner - Changes improper fraction to mixed numbers - Changes mixed numbers to improper fractions	- Discussion - Explanation - Discovery	Effective communication Critical thinking Problem solving	- Counters - Fruits	- Converting improper fractions to mixed numbers and vise versa	- New MK pg 73 - Fountain 73-75 -	-
6	1		Conversation of fractions	Changing common fractions to decimals Changing decimals to common fractions	- The learner - Converts common fraction to decimals - Converts decimals to common fractions	- The learner - Changes common fraction to decimals - Changes decimals to common fraction	- Do	Do	- Wall chart showing conversion of fraction to decimals and vise versa	- Answering oral questions and written questions	- New MK pg88 - NCDC 81	-
	1		Recurring decimals	Rational numbers to recurring decimals Recurring decimals to rational numbers	- The learner - Converts rational numbers to recurring decimals - Converts recurring decimals to rational numbers	- The learner - Spells and uses the words recurring and rational to make sentences	- Explanation - Discovery - Question and answer	Do	- Wall chart showing all working well laid out	- Converting rational numbers to recurring decimals and vice versa	- New MK pg 55 - Fountain 122-125 - NCDC	-
	1		Ordering fractions	Arranging fraction in ascending and descending using LCM and percentage Comparing fractions using >,< and =	- The learner - Arranges fractions in ascending and descending order - Compares fractions using >,<, or =	- The learner - Defines ascending and descending	- Discovery - Participatory learning	Do	- Paper cutouts - Fruits	- Answering oral and written questions	- Tr's collection - Fountain mtc pg 119-120	-
	1		Operation on fraction	Addition f fraction Proper fractions Mixed fractions	- The learner - Adds proper fractions and mixed fractions - Finds LCM of denominator	- The learner - Reads regular fractions - Reads word problems involving addition of	- Explanation - Guided discovery - Demonstration	Do	Cut outs Fruits Chalkboard illustration	Cutting fruits Shading adding	- New MK pg 73 - Fountain 75 - Macmillan	-

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						fraction						
7	1	Fractions		Subtraction of fraction Proper Mixed fractions Word problem	- The learner - Subtracts proper fraction - Subtracts mixed fractions	- The learner - Reads vulgar fraction - Interpret word problem	- Do	Do	- Do	- Answering oral and written questions	- New mk bk 7 75-76	-
			Multiplication	Fractions and whole numbers Fraction by fraction Word problem	- The learner multiplies fractions and whole numbers - Multiplies fraction by fractions - Reduces fractions	- The learner - Reads and interprets fraction involving multiplication	- Guided discovery - Explanation - Discussion	Do	- Do	- Oral and written exercises		-
			Division	Use of LCM and reciprocal Fraction by fraction Fraction by whole numbers Mixed by fractions Word problem	- The learners - Uses LCM and reciprocal to divide fractions - Interpret word problem	- The learner read and interprets fractions involving division	- Do	Do	- Wall charts	- Do	- New mk bk 7 80 - Trs' collection	-
			Mixed operations	Use of BODMAS Addition and subtraction Multiplication and division 3 operations 4 operations Use of brackets	- The learner - Applies BODMAS in working out problems	- The learner - Gives the meaning of BODMAS	- Discussion - Explanation - Guided discovery	- Do	- Wall chart showing necessary calculations	- Do	- New Mk bk 7 pg 74 - Understanding mtc bk 7 pg 74-75	-
			Application of fraction	Direct fraction Application of remainders Taps	- The learner - Applies fraction in the daily life situation - Interprets fraction involving remainders	- The learners - Uses the word remainder correctly	- Discussion - Demonstration	- Logical thinking - Effective communication	- Containers - Papers	- Solving problems involving application of fractions - Finding the remainders	- New MK pg 77-79 - Mk NDCD 82-85 -	-
			Decimals	Place values of decimals Values of decimals	- The learner - Identifies the place values of decimals - Finds the values of digits	- The learners - Spells the place values of decimals - Pronounces the place value correctly	- Guided discovery - Discussion - Explanation	- Problem solving - Effective communication - Creative thinking	- Place value - Chart showing decimals	- Identifying place values - Finding values of digits	- Understanding mtc pg 4	-
8	1		Do	Reading and writing decimals in words Reading and writing decimals from words to figures	- The learner - Reads and writes decimals in words and figures	- The learner reads and spells the words correctly	- Do	Do	- Chalkboard illustration	- Reading and writing decimals in word and in figures	- New Mk pg 27-29	-
9	1		Do	Expanding decimal Finding the expanded decimals	The learner Expanding decimals using values and powers Fins the expanded	- The learner - Uses the words expanded and simplify	- Do	- Do	- Do	- Expanding and finding single numbers	- New mk pp 29 - Understanding mtc pg 38-39	-
	1			Scientific form (standard form) Rounding off decimals to	Writes decimal numbers in standard from Rounds off decimals up to	- Explains what scientific notation is	- Explanation - Guided discovery	- Effective communication - Problem solving	- Number line - Chalkboard illustration	- Writing numbers in standard dorm	- Macm pg 63-64 - Fountain 31-33	-

Tekart learning 0754895241/0783298434

				hundred thousandths	hundred thousandths	- Explains what rounding off is - Reads rounded off numbers				- Reading rounded off numbers	- New mk 32-34 - Fountain 79-80	
	1		Operation on decimal upto tens thousandths	addition of decimals subtraction of decimals word problem	- Adds decimals - Subtracts decimals - Reads and interprets word problems - Arranges decimals according to place values	- Reads and adds, subtracts decimals	- Discussion - Guided discovery	- Creative thinking - Problem solving	- Chart showing addition and subtraction of decimals	- Adding and subtracting decimals	- New mk 94 - Understanding mtc 40	-
	2		Multiplication of decimals by ; Whole numbers Decimals	Multiplies decimals by whole numbers and decimals Puts the correct number of decimals places	- Reads decimal multiplication	Do	- Do	- Multiplication table chart	- Multiplying - Adding - Counting	-	- New mk 83-86 - Fountain 78-79	-
				Division of decimals by Whole number s Decimals	- Divides decimals by whole numbers and decimals - Maintain the correct number of decimal places	Uses the reciprocal Uses brackets properly	- Guided discovery - Explanation - Discussion	- Creative thinking - Problem solving -	- Chart showing division of decimals	- Dividing decimals by whole numbers and by decimals	- New mk 86 - New mk 2000 pg 97	-
				Combined operation on decimals Addition and subtraction Multiplication and division Addition , subtraction, multiplication and division	- Uses BODMAS to work on decimals	Reads and uses BODMAS correctly	- Explanation - Guided discovery - Group discussion	- Critical thinking - Effective communication - Problem solving	- Chalkboard illustration	- Answering oral and written exercises	- New mk 86-89 - New mk 2000 pg 94	-
10	1		Ratios	Review on ; Forming ratios Expressing rations as Fractions Decimals Percentage	- Expresses numbers in ratio from	- Describes ratios	- Discussion - Group work	- Problem solving - Effective communication	- Do	- Forming and expressing numbers in ration from	- New mk 1000 - New mk 95-97	-
	1			Ratio increase and decrease Finding the ratio of increase and decrease	- Increase and decreases number in given ratios - Finds the ratio of increase or decrease	- Uses the words increase and decreases	- Guided discovery - Problem solving	- Creative thinking - Critical thinking - Effective communication	- Real objects	- Reading - Adding - Subtracting - And dividing	- New mk pp 111 - New mk 97 - Fountain 83	-
	2			Sharing quantities in ratios Finding the ratio in which quantities are shared Finding the number shared in a given ratio	- Shares quantities in given ratios - Finds the number shared in a given ratio	- Applies ratios in solving given numbers correctly	- Guided discovery - Explanation - Discussion	- Critical thinking - Creative thinking - Problem solving	- Real objects	- Answering oral and written activities	- New mk 2000 pp 112-117 - New mk 98-99	-
			Proportion	Review direct proportion Inverse proportion	Describes direct and indirect proportion Uses proportions to solve problems	- Reads and uses the word proportion	- Do	- Do	- Chalkboard illustration	- Solving problem involving application of	- New mk 114-117 - Fountain 84 - Mk ncdc 61-64	-

Tekart learning 0754895241/0783298434

										proportions		
			Percentages	Percentage to decimals Percentage to fraction Percentage to ratios Decimals to percentage Fraction to percentage Ratios to percentage	Change percentage to decimal , fraction , and ratios and vice versa	- Defines - Percentage	- Discussion \group work	- Effective communication - Critical thinking	- Do	- Changing from percentage to decimals fractions and ratios	- New mk 2000 pp 121 - New mk 105-108 - Fountain 85-87	-
				Expressing quantities as percentage Finding percentage parts of quantities Application of percentage parts	Expresses as percentage Applies percentages to find parts	- Uses the percentage symbol correctly - Reds and interprets questions involving	- Explanation - Guided discovery - Discussion	- Creative thinking - Problem solving	- Wall clock and real objects	- Changing quantities t o the same units - Oral and written questions	- New mk 2000 ppp 122-125 - New mk pp 110-111 -	-
				Percentage profit Percentage loss Discount and percentage discount More about application on percentage profit and loss	Finds profit and %age cost profit Finds loss and %age loss	- Reads and uses the words profit and loss correctly	- Guided discovery - Discussion -	- Do	- Shopping bills	- Using profit and loss to get %age profit and % age loss	- Ncdc 69 - Fountain 88-89 - New mk 2000 pp 137-139	-
				Find the original cost when the %age loss or profit is given	Find original cost using %age loss or profit	- Uses profit or loss to get the original cost	- Do	- Problem solving - Critical thinking - Effective communication	- Chalkboard illustration	- Answering oral and written work	- Ncdc 97 - New mk 125-126	-
				Finding simple interest Finding principal and amount Finding rate Finding time	Reads and finds simple interest , amount , rate and time	- Defines the words simple interest, principal , amount, rate, time	- Do	- Do	- Do	- Dod	- New mk 2000 pp 150-155 - Mk ncdc 71-75 - Fountain 90-91	-
			Order of integers	Opposites/inverse of integers Order of integers	Find the inverse of integers Orders integers Describes integers	- Defines integers - Inverse - Uses the word inverse to make sentences	- Discovery - Cooperation - Thinking pair share	- Problem solving - Critical thinking - Effective communication	- Mathematical rule - Number line - Ladders - Floor	- Finding the opposites of integers - Ordering integers	- New mk 309 - Fountain 93-94	-
			Addition and subtraction	Addition of integers Using a number line Without using a number line Subtraction of integers Without using number line	Carries out addition and subtraction Uses the number lien correctly	- Describes the forward and backward movement	- Demonstration - Discussion	- Do	- Do	- Solving problems - Involving addition and subtraction	- Fountain 245 - New mk 389- - New mk 352	-
			Division and multiplication	Multiplication of integers Using a number line Without using a number line Division of integers Using a number line Without using a number line	Draw number line Carries out division and multiplication	- Describes real life situation where integers are applied	- Demonstration - Explanation	- Do	- Do	- Drawing number line - Oral and written work	- Fountain - New mk	-

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			Application of integers	Word problems involving integers	Applies integers in our daily life situation Interprets word problem	- Reads and interprets word problems	- Discussion - Explanation	- Do	- Do	- Solving problems involving word problems	- Fountain 94-96	-
			Finite system	Addition and subtraction of in finite system Using a dial Without using a dial	Adds and subtracts numbers in finite system	- Gives the meaning of words like finite, dial and amnthmetic	- Guided discovery - Demonstration - Discussion	- Creative thinking - Discovery	- Clock faces - Ladders - Charts	- Addng and subtracting using drawing dials	- Fountain 96-101 - Macm 252-254	-
				Multiplication in finite system Division in finite system	Describes division and multiplication in finite system	- Reads and interprets in finite system	- Do	- Do	- Do	- Oral and written work	- Fountain 201-105	-
				Algebra in finite system Application of finite system	Solves word problem involving clock arithmetic Applies finite system in daily life situation	- Describes the backward and forward movements during clock arithmetic (finite system)	- Explanation - Discussion - Group work	- Effective communication - Critical thinking - Problem solving	- Chalkboard illustration	- Solving equations involving finite system	- Fountain 105 - Macm 81-84 - Mk ncdc 84	-
		Data handling	Review of graph	Bar graphs Pictor graphs Line graph Scale Using given data to draw bar and time graph Temperature graph	Interpret e the given graphs Differentiate between vertical and horizontal scales	- Gives the meaning of bar, picto graph, line graph etc - Identifies vertical and horizontal scales	- Discussion - Demonstration - Explanation	- Problem solving - Critical thinking - Effective communication	- Mathematical sets - Manila cards - Learners	- Drawing graphs - Shading graphs	-	-
				Travel graphs Interpreting travel graphs Drawing travel graphs	Draw travel graph Interprets travel graph	- Uses the given information to interpret and	- Do	- Do	- Do	- Do	- Macm 115 - Fountain 119-124 - Ncdc 97	-
			Coordinate graph	Stating coordinates of a point on a grid Plotting given points on a grid Joining points to form geometrical figure Naming and calculating area f the figure formed	Presents and interprets information on coordinate grid Form ordered pairs Name and calculates area of the formed figure Write correct units	- Reads information on coordinates grid - Describes the figure formed	- Demonstration - Discussion - Explanation - Observation	- Effective communication - Critical thinking - Problem solving	Mtcal set Wall chart	- Drawing - Naming points - Plotting - Interpreting information	- Ncdc 98-99 - Macm 124 - Fountain 124-127	-
				Lines formed by ordered pairs Completing tables	Completes tables by filling the missing integers	- Uses the given equation to complete tables	- Do	- Do		Drawing - Completing tables	- Macm 127-131 -	-
			Pie charts	Drawing circle graphs using fractions/degrees / %ages Finding unknown and amount shared	Draws pie chart Interprets circle graph and find unknown Present information on pie chart	- Explains steps filling when drawing pie chart - Reads information on pie chart	- Do	- Effective communication - Creative thinking	Mtcal set Ruler Ropes	- Drawing and showing position - Finding the unknown	- Macm 118-123 - Mk ncdc 91-93	-

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			Statistics	Median , mode, range, mean, average, modal frequency (measure of central tendency_	Describes what median , mode, mode, range means	- Gives and uses the given words correctly	- Do	- Do wall charts	Calculating the given exercises	-	- Fountain 127-129 - Macm 133	-
			Probability	Tossing a coin Rolling a dice Tossing two coins Dice and a coin	Defines probability Calculates probability of numbers	- Discusses the ways of finding probability of numbers	- Guided discovery - Discussion - Explanation	- Effective communication - Critical thinking	Tossing Rolling	-	- Do	- Do
		Geometry / construction	Lines and angles	Measuring and constructing lines Types of angles Parallel and perpendicular lines Skew lines	Draw lines Measures lines Describes the type of angles Constructs parallel lines	- Explains parallel - Bisecting , skew, and perpendicular lines	- Demonstration - Discovery - Discussion - Explanation	- Creative thinking - Problem solving - Logical reasoning	Mtcal set Boxes Classroom tables Books	- Constructing. Drawing parallel and skew lines	- Macm 152 - Fountain 139 - Ncdc 107	-
			Angle properties	Complementary angles Supplementary angles Vertically opposite angles Exterior angles Interior angles Corresponding angles More about angles and parallel lines	Identifies eh angle properties Solves the unknown angles	- Explains supplementary angels - Complementary angles - Vertical angles - Alternate , corresponding angles - Interior and exterior angles	- Do	- Do	Do	- Solving numbers involving angle properties	- Fountain 139 - Ncdc 10	-
			Construction	Bisecting lines and angles Constructing angles e.g 60, 90, 45, 75, 22.5 etc Constructing triangles Constructing polygons, hexagon, pentagon, rhombus, squares, rectangles, parallel	Construct and bisects angles Construct simple polygon States property of regular polygons	- States properties of regular polygon	- Do	- Do	Do	- Bisecting and constructing angles	- Fountain 153 - Mk ncdc 131 - Macm 169	-
			Bearing and scale drawing	Rotation /revolution Direction faced after turning through a certain angle Angels formed on compass direction Angles formed by the minutes and hour hand of the clock	Draws the compass direction Describes clockwise and anticlockwise Finds the angles formed in the compasses direction	- Uses clock wise and anticlock wise - Spells north , south, east etxc	- Demonstration - Guide discovery - Discussion	- Creative thinking - Problem salving - Effective communication	Compasses direction Clocks	- Drawing showing compass direction - Turning different direction	- Macm 226 - Fountain 158	-
				Ordinary bearing Finding the direction of one point from another Opposite direction of ordinary bearing	Describes ordinary bearing Finds the direction of one point from another Finds the opposite direction of ordinary bearing Finds the angle that	- Uses ordinary bearing to find the direction - Describes angles	- Do	- Do	Do	- Showing the ordinary bearing of different location - Calculating angles	- Macm 232 - Fountain 159	-

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				Finding the true bearing of one point from another Opposite bearing Linear scale drawing Scale drawing Sketching drawing	Draws bearing Scale Describes direction	- Describes bearing and direction	- Demonstration - Guided discovery - Discussion	- Creative thinking - Problem solving - Effective communication	Chalkboard illustration Geometrical sets	- Drawing - Measuring	- Macm 235 - Mk ncdc 146	-
			Time	Expressing time Changing hours to minutes Changing minutes to hours and seconds Changing hours to minutes and seconds	Reads time Interprets time correctly Converts units of time	- Reads time - Names units - Writes o'clock units of time am, pm in full	- Guided discovery - Questions and answer - Demonstration	- Critical thinking - Problem solving	Cutouts Wall charts	- Reading - Writing - Reciting	- Fountain 166	-
				Clock system Changing 12 hour clock system to 24 hour clock system Converting 2 4 hour clock to 12 hour clock system	Reads time, writes units , interprets clock system Add time Subtracts time	- Reads time - Write am and pm in full - Describes unit of time	- Guided discovery - Question and answer	- Problem solving - Effective communication	Wall faces Wall charts	- Reading - Writing - Adding - Subtracting	- Fountain 167 - Mkncdc 151 - Macm 165	-
				Finding duration Finding duration of same unit time Finding duration of different units time i.e. Am and pm Finding duration involving two days	Reads time Adds time Subtract time Convert time	- Reads units time - Defines units of am and pm	- Discussion - Guided discovery	- Critical thing - Problem solving	Wall clock Wall charts	- Reading - Reciting	- Macm 269 - Fountain 169	-
				Time tables School timetable Taxi and bus timetable Travel timetable Marine timetable Air timetable	Reads timetables Makes timetables Converts time Calculates duration	- Reads timetables - Describes word departure and arrival - Interprets timetable	- Guided discovery demonstration	- Problem solving - Effective communication	Uses timetable Wall face Wall charts	- Reading - Drawing - Making timetables	- Fountan 169 - Macm 270	-
				Programs Radio program Television program	Listens to a radio Watches the TV Draw makes tv/radios	- Spells words radio, and television - Interprets program	- Demonstration - Discussion	- Critical thinking - Effective communication	Radio Tv Flash cards	- Reading - Drawing	-	-
				Review Speed Changing km/hr to m/s Changing m/s to km/hr	Changes km/hr ot m/s Changes m/s to km/hr	- Writes km/hr to m/s in full - Describes units km/hr and m/s in full -	Guide discovery Discussion	- Critical thinking - Problem solving	Wall chart Chalkboard illustration	- Reading - Converting	- Mk 331 - Mk ncdc bk 6 116-117	-
								-		-	-	-
		Measurement	Length Mass And capacity	Length Comparing metric units Changing meters millimeters and vice versa	Reads the metric table Recites the metric table Converts to required units	- Uses with words - Kilogram - Metres	Demonstration Discussion Guided discovery	- Decision making - Problem solving - Critical thinking	Meters rule Tape measure Weighing scale	- Measuring - Reading - Reciting	- Fountain 172 - Macm 260	-

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				Changing km to m and vice versa		- Millimeters - In sentences						
				Adding metric units Subtracting metric units	Adds figures Regrouping figures Subtracts figures	- Reads the given metric unit s - Describes the given metric units	Question and answer Demonstration	- Problem solving - Critical thinking	Wall face Metre rule	- Adding - Measuring - Subtracting	- Macm 260-261	-
				Multiplication of metric units Division of metric units	Multiplies metric units Divides metric units Regroups metric units	- Reads the metric units - Describes the given units	Guided discovery Discussion	- Decision making - Critical thinking	Chalkboard illustration Metre rule	- Multiplying - Dividing	Do	-
			Money	Review Shopping bill and bill tables Currency notes Exchange rates	Multiples figures Adds Divides Simplifies	- Reads word problems - Interprets the given words - Writes and uses words - Exchange - Currency - Forex - Foreign exchange	Demonstration Explanation	- Effective communication - Decision making - Problem solving	Money Items Like books, pens etc	- Role playing - Reading	Mk old edition	-
			Perimeter	Find perimeter quadrilaterals Perimeter of combined shapes Perimeter of regular polygons Number of poles in line and perimeter	Draws figures Names figures Add sides of figure	- Describes perimeter - Interprets different shapes - Writes names of the shapes	Demonstration Guided discovery	- Do	Cutouts Chalkboard illustration	- Cutting - Naming - Tracing - Drawing	Fountin 173 Mk ncdc 162	-
			Circumference of a circle	Find circumference of a circle given the radius Finding the circumference of a circle given diameter	Draws circles Finds the circumference Simplifies expressions	- Describes the word circumference - Interprets the parts of a circle	Guided discovery Demonstration	- Problem solving - Critical thinking	Cutouts Chalkboard illustration Basins Tins Wires String	- Drawing - Naming - Measuring	Fountain 176 Mk ncdc 167	-
			Finding radius /diameter of the circle given circumference	Finding radius given circumference Find the diameter given circumference	Draws shapes Identifies missing parts	- Reads word statement - Interprets word statements	Discussion Question and answer	- Effective communication - Problem solving	Chalkboard illustration Cutout	- Reading - Drawing - Tracing - Shading		-
			Application of circumference	Finding number of revolutions Finding length of a piece of wire Finding diameter of given length of the wire	Measures object s Cut out strings Interprets word statements Solves problems	- Reads word problem - Interprets word statements - Spells words - Revolution - Circumference	Guided discovery Discussion	- Problem solving - Critical thinking	Tins String Razorblade Cutouts Wires Tins	- Cutting - Drawing - Measuring	Fountain 184-186	-

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			Areas	Finding area of triangles Finding missing parts given area of a triangle Word statement involving a triangle	Draws figures Interpret word statements Finds area	- Describes the term area - Interprets word problem	Effective communication Problem solving	- Cutouts - Chalkboard illustration	Drawing Tracing	-	Mk ncdcn 160	-
				Comparing area of a triangle Finding missing part of triangle by comparing its area	Draws interprets triangles Forms equations Solves word problem	- Interprets statements - Read given statements	Guided discovery Discussion	- Problem solving - Critical thinking	Cut out Chalkboard illustration	- Drawing - Reading		-
				Area of quadrilateral Rectangle Square Rhombus s Parallelogram Kite Trapezium Areas and lectures	Draws figures List properties of figures Finds area	- Reads the names of quadrilaterals - Spells the names of quadrilateral	Guided discovery Discussion	- Problem solving Critical thinking	Cut outs Wall charts	- Drawing - Cutting - Tracing - Scriting	Mk ncdc 161 Macm 262 Fountain 186	-
				Area of a circle Finding area of a circle Word problem involving area of a circle	Draws circles Measures objects Finds area of a circle	- Interprets statements - Reads word problems	Guided discovery Explanation	- Problem solving - Critical thinking	Wall charts	- Drawing - Cutting - Shading - Tracing	Fountain 190 Mk ncdc 134	-
				Find are of a circle given circumference Finding parts of a circle given tis area	Forms equation for unknown Finds missing parts	- Reads word statements - Interprets word problems	Discussion Questions and answer	- Do	Do	- Do	Fountain 190	-
			Area of parts of a circle	Area of a semi circle Area of a quadrant Area of a sector using R 360	Names parts of a circle Shades parts of the circle Draws parts of the circle Finds area of the sector	- Reads and uses words semi circle, quadrant - Sector - Describes names of parts of a circle	Guide discovery Explanation Question and answer	- Critical thinking - Problem solving	Cutout Wall charts	- Naming - Drawing - Shading	Fountain 195 Mk ncdc	-
			Area of combined shapes of circle	Finding are of circles combined with Rectangles Squares Triangles Other regular polygons	Draws figures Interprets combined Shapes	- Names parts of combined shapes - Interprets the given shapes	Explanation Questions and answer	- Critical thinking - Problem solving	Cuts outs Chalkboard illustration	- Drawing - Cuttings - Reading	Fountain 193	-
			Shaded regions involving circle	Area of shaded regions of circles combined with Rectangles Squares Triangles Other regular polygons	Draws shades shapes Finds shaded shapes	- Describes shaded part - Names the given shapes - Interprets figures given	Guided discovery Question and answer	- Effective communication - Problem solving - Critical thinking	Cutouts Wall charts	- Drawing - Shading - Painting - Cutting		-
			Application of area of circle	Finding number of pieces of cards, circular sheets, etc that can be cut from a manila card ,. Iron sheet , metric sheet etc	Draws from interpretation Interprets word problems Cuts objects given	- Reads word problem - Interprets word statements	Demonstration Discussion	- Do	Manila cards Paper Razorblade Wall charts	- Cutting - Drawing - Shading	Mk 389	-

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			Finding radius or diameter of a circle given area	Finding radius of a circle given area Finding diameter of a circle given area	Interprets word statements Forms unknown Solves for unknown parts	- Interprets word problems - Interprets given statements	Guided discovery Question and answer	- Do	Do	- Do	Mk 391	-
			Finding circumference given area of a circle	Calculating the circumference of circle given area	Finds the radius Interprets word problem Calculates the circumference	- Reads the word problem - Interprets word problem	Guided discovery Explanation Discussion	- Critical thinking - Problem solving	Wall charts Chalkboard illustration	- Reading - Drawing - Forming equation	Fountain 193	-
			Total surface area	Finding total surface are of a cuboid Finding total surface area of a cube Finding missing side given total surface area of a cube	Draws accurate figures States the properties of each figure Finds total surface areas	- Describes cuboid - Cubes - Reads and uses words cuboid and cubes	Demonstration Guided discovery Explanation	- Problem solving - Effective communication	Boxes Papers Manila cards Metres ruler	- Cutting - Drawing - Shading	Fountain 195*-198	-
			Total surface area of a triangular prism	Total surface area of a triangular prism Total surface area of a cylinder Total surface are of a trapezium	Draws figures Makes prisms Measures sides of prisms	- Describes the names of prisms - Interprets the written word problems	Discussion Guided discovery Explanation	- Critical thinking - Problem solving	Wall charts Cutouts Boxes Manila Tins	- Cutting - Tracing - Painting	Fountain 199	-
			Volume	Volume Cuboids Cubes Triangular prism Trapezium prism Cylinder Spheres (4/3 r^3)	Makes cut outs Draws figures Interprets figure Interpret figures	- Describes figures - Names figures	Question And answer Discussion	- Problem solving - Critical thinking	Cutouts Boxes Tins Charts	- Cutting - Tracing - Reading - Shading	Mk ncdc 170	-
			Packing	Packing cubes into cuboid Packing cylinders into cuboid	Draws figures States properties of figures	- Demonstration - Guided discovery - Discussion	Effective communication Critical thinking	- Boxes - Tins		- Packing - Cutting - Drawing		-
		Weight/mass and capacity		Mass Mass is the quantity of matter in an objects Units on grams and kilograms 1kg – 10 Newton (weight) Converting kg to tonnes Converting grams to kg Addition and subtraction of mass	Defines mass States the difference btn mass and weight Converts kg to quintals Kg to tonne	- Spells - Quintals - Tonne	Demonstration Discovery Discussion	- Effective communication - Problem solving - Critical thinking	Bears balances Weight balances Scale Spring Balancing	- Converting - Weighting	Fountain 209 212 Mk Macm 264	-
			Collecting like terms	Collecting likes terms of different variables Collecting like term in figures Rectangles Square Pentagon Trapezium	Reads word statements Draws figures Collects like terms Simplifies like terms	- Reads word statements - Interprets the given variables	Discussion Explanation	- Problem solving - Critical thinking	Chalkboard illustration	- Reading - Collecting like terms	Mk ncdc 175 Fountain 215	-

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		Algebra	Forming algebraic expressions	Forming algebraic expressions using words like Twice Trice Half Square Double etc	Forms variables Adds terms Subtracts terms	- Reads word statements - Interprets word statement	Discussion Guided discovery	- Problem solving - Critical thinking	Chalkboard illustration	- Reading - Forming expressions	Fountain 215 Mk bk 7 pg 427	-
			Expression involving brackets	Removing brackets in expression involving brackets	Reads expression correctly Multiplies variables Simplifies terms	-	Guided discovery Discussion	- Problem solving - Critical thinking	Wall chart	- Reading - Opening brackets - Adding - Subtracting	Mk pp 43-433 Fountain 215	-
			Expression with brackets and fraction	Removing brackets with fraction variables	Do	- Do	Do	- Do	Do	- Do	Do	-
			Subtraction	Substitution in algebra	Expands terms Substitution terms Adds terms Multiplies terms Simplifies	- Spells the words substitution - Interprets terms	Guided discovery Discussion Discussion	- Problem solving - Critical thinking	Chalkboard illustration	- Reading - Expanding - Substitution	Mk bk 7 pp 429 Fountain 216 Mk ncdc 178-179	-
			Expression with powers	Adding and subtracting with powers Multiplying expressions with powers Dividing expression with powers	Adds expression Subtracts expressions Multiplies Divides Simplifies	- Reads expression - Describes words - Powers - Indices - Exponents	Guided discovery Discussion	- Problem solving - Critical thinking	Wall chart Chalkboard illustration	- Reading - Solving	Fountain 218 Mk ncdc 181 Mk pp 752 - 456	-
			Equations	Revision of simple equation Examples X+5+=13 y-3=5 3x+6=18 X^2+1 = 10 3(2x+1) -2(x+4)=35	Reads equation Solves equations Simplifies equations	- Describes the term equation - Simplifies equation	Describes equation Defines term Variables Coefficients Unknown	- Guided discovery - Discussion	Problem solving Critical thinking	- Wall chart - Chalkboard illustration	Mk 452 Fountain 218 Mk ncdc 181	-
				Equations involving fraction Examples ½ p = 6 4 1/3 q + 2 = 15 $\frac{13}{3}p \quad \frac{m+1}{3} + \frac{m}{4} = 2$	Reads equation Solves Simplifies	- Reads equation - Describes given equation	Discussion Questions and answer	- Do	Do	- Do	Fountain 221-222 Mk ncdc 185	
				Equations involving powers Examples Q + 4 = 20 ½ p^2 = 8 1/3 p^2 = 12	Reads equation Solves equation Simplifies	- Describes terms - Powers - Indices - Exponents - Reads equation	Guided discovery Discussion	- Critical thinking - Problem solving	Wall chart Chalk board illustration	- Reading - Writing	Mk 427 Fountain 224-225 Mk ncdc 187	
			Word problems in	Forming and solving equation from word	Reads word problems Forms equations	- Reads word problems	Discussion Demonstration	- Problem solving - Effective	Pens Books	- Reading - Counting	Fountain 222-223	

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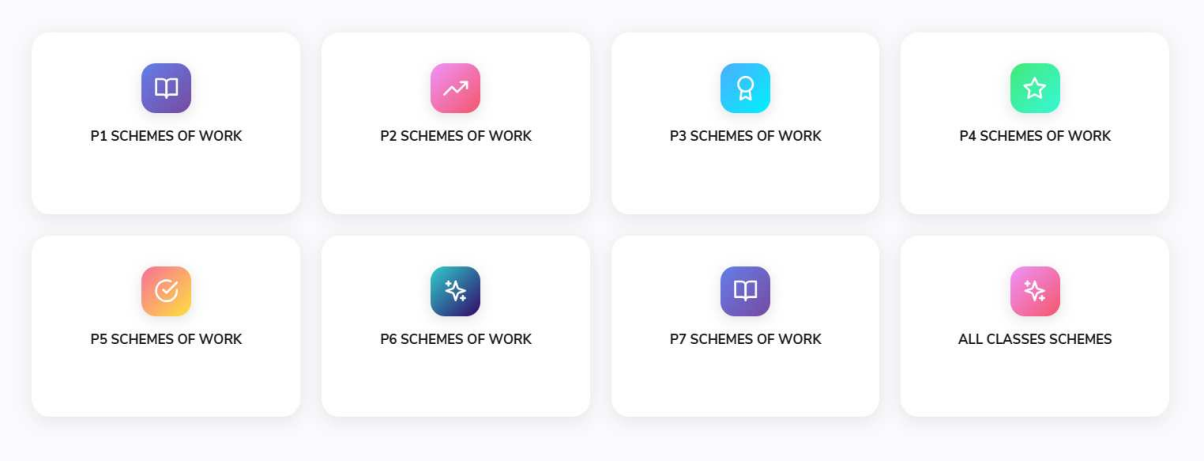
			algebra	problems	Solves equation	- Describes written statements - Interprets terms like - Twice - Thrice - Less than - More than etc		communication	Oranges Mangoes Money Wall charts	- Sorting	Mk bk 7 346-365 Mk ncdc 190-191	
			Inequalities	Inequalities with infinite solution sets Examples Find the solution set for x<5 Soln- X ={4,3,2,1,0,-1,…}	Reads inequalities Draws a number line Finds the solution set Writes symbols of inequalities	- Defines terms inequality - Solution set - Describes words - Less than greater than	Guided discovery Discussion	- Critical thinking - Problem solving	Reading Drawing Counting	- Wall chart - Books - Pens	Mk 444 Fountain 227-229	
				Inequalities with finite solution sets Example -2<x<2 Solution X={-1,0,1}	Do	- Do	Guided discovery Explanation	- Problem solving - Critical thinking	Do	- Do	Mk pp 445 Mk ncdc 192-193 Fountain 231-232	
				Solving simple inequalities Example Solve and list the solution 3x>9 $\frac{3x}{3}>\frac{9}{3}$ x>3	Reads inequalities Solves Lists solution set	- Reads inequalities - Uses words - Less than - Greater than - Less or equal to - Greater or equal to in sentence	Discussion Demonstration	- Problem solving - Effective communication	Do	- Do	Mk bk 7 448 Fountain 230	
				Solving inequalities involving fraction Example Solve and list the solution set $\frac{2x}{3} \leq 2$ Solution $3 \times \frac{2x}{3} \leq 2 \times 3$ $2x \leq 6$ $\frac{2x}{2} \leq \frac{6}{2}$ 3 X ≤ 3 X = {3,2,1,0,-1,----}	Reds inequalities Solves Simplifies Lists the solution set	- Reads inequalities - Uses words Less than Greater than Less or equal to Greater or equal to in sentences -	Discussion Demonstration	- Problem solving - Effective communication	Do	- Do	Mk bk 7 448-449 Fountain 230-231	
				Solving finite inequalities Example Solve and list the solution	Solves inequalities Simplifies Lists the solution set	- Reading the inequalities - Interprets	Guided discovery Discussion	- Critical thinking - Problem solving	Wall chart Chalkboard	- Reading - Drawing - Counting	Mk bk 7 449 Fountain 231 Mk ncdc 194	

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				set 8 > 2x > 2 8> 2x > 2 2 2 4>x>1 X={3, 2}		symbols - Describes symbols						
				Solving inequalities involving brackets Example Solve the inequality 2(x+1)>4 Solution 2x+2>4 2x>4+2 2x>6 X>3	Do	- Do	Do	- Problem solving - Effective communication	Do	- Do	Mk bk 7 449	
				Word problems involving inequalities Example The Headteacher's car can accommodate maximumly 5 people. Show this inequality Solution x≤ 5	Reads word problem Forms inequalities Forms inequalities Solves inequality Simplifies	- Reads word statements - Describes word statements - Interprets symbols	- Guided discovery Discussion	Problem solving - Critical thinking	- Pens - Bottle tops - Straws - Pencils Wall chart	Reading Drawing Counting - Solving	Mk bk 7 450-451	

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