Tekart learning P.6 Mathematics Scheme of Work - Term One I

| WK | PD | TOPIC | SUB TOPIC | CONTENT | Subject competence | Language competence | Life skills | Method | t/l aids | REF | REM. |
|----|----|-------|----------------------------------|---|--|--|---------------------------------------|---|--|---|------|
| 1 | 1 | SETS | Types of sets | Equal sets Equivalent set Unequal Non equivalent sets Matching sets | Spells Reads, pronounces and uses new words in the sentences | Lists , counters, elements of different sets | - Discussion - Guided discovery | - Real objects - Flash cards - Chards - Containers - Counters - Stones - Sticks - Abacus - Papers | creative thinking Effective communicati on Cooperation Critical thinking Problem solving | - Mk new edition pg 1-2 - Understanding mtcpp 1-3 - Fountain primtc1-8 - Fountain pg 8- 10 | - |
| | 2 | | | Intersecting set Joint sets Disjoint sets Union sets Universal sets | - | Draws Venn diagrams Lists elements Identifies elements | - Do | - Do | - Do | -Do | - |
| | 3 | | | Difference of set Shading regions Complements of sets | - | Finds difference of sets Shades regions Finds complements of sets | - Do | - Do | - Do | Do | - |
| | 4 | | | Subsets Listing and forming subsets Finding number of subsets and proper subsets | - | - Lists subsets Vinds number of subsets | - Do | - Do | - Do | Do | - |
| | 5 | | Finding number of elements | Listing elements Finding number of elements Representing elements on the venn diagram | Spells reads, pronounces and uses new words correctly | Lists members Finds number of elements | - Real objects | - Mathematical ruler | - Logical reasoning | Mk old edition pp 20-22 | - |
| | 6 | | Application of set concepts | Representing elects on the venn diagram Interpreting on the venn diagram Finding number of elements | - | Represents information on a venn diagram Interprets information on the venn diagram Finds number of members on the venndiagram | - Think - Pair - Share | - Clock faces - Mtc sets - Learners - Manila cards - Boxes - C.compases - Bottle tops | - | Mk old edition 22-25 | - |

| | - | 1 | _ | - Interpreting word | Interests accounts | | | 1 | | Fountain 10-13 | |
|---|----------|---------------|---|---|--|---|------|-------------------------------|------|--|---|
| | ' | | | problems - Representing information on the venn | Interprets , represents and solves for unknown on the venn diagram | - | - | - | - | Fountain 10-13 | - |
| | | | | diagram - Solving for unknown | | | | | | | |
| | 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 | - |
| 2 | 1 | Whole numbers | Place and values | - Spells , reads , pronounces and uses the words correctly | Finds the place values and uses operation | - | - | - | - | Mk new edition 14-15 Fountain 20-23 | - |
| | 2 | | Expanded form | Using values Using place values Using powers of tens and multiplies of ten | - | 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 place values Rounding off whole numbers | - Do | Identifies nearest place values and requires place values Rounds off whole numbers | - Do | - Do | - Do | Mk old edition 48 Understanding 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 | - |
| 3 | 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 | Multiples, 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 Multiples 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 | Basses | 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 Changing to decimal base | - Do | Identifies place values and changes to base ten | - Do | - Do | - Do | Tr's collection | - |
| 4 | 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 | - Do | Solves equation in finite system | - Do | - Do | - Do | Do | - |

| | | | | Finding the unknown | | | | | | | |
|---|---|------------------------------|-----------------------------------|---|--|--|------|------|------|--|---|
| | 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 | | 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 | - Do | - 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 | - |
| 5 | 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 | Using long division Regrouping Multiplying Subtracting Dividing | - Do | Divides | - Do | - Do | - Do | New mk 29-30 | - |
| | 3 | | Word problem | Interpreting statement Writing mathematical statements Dividing quantities | - 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 | Commutative property Distributive property Associative property | - Do | Uses the properties correctly | - Do | - Do | - Do | Fountain 38-39 | - |
| | 6 | Patterns and sequences | Divisibility tests | Divisibility tests of 2, and 10 Divisibility of 3,6, and 9 Divisibility of 4 and 8 | - 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 | Odd and even numbers Triangular, square and whole numbers Counting numbers | - Do | Lists and completes number patterns | - Do | - Do | - Do | Fountain 43-48 Mk new 37 | - |
| | 8 | | Prime and composite numbers | Listing prime numbers Composite numbers | - Do | Lists and identifies composite and prime numbers | - Do | - Do | - Do | Old mk 77-78 | - |
| 6 | 1 | | Consecutive numbers | Natural numbers Counting numbers Integers Forming equation | - Do | Forms number patterns and equations Solves | - D | - Do | - D | Fountain 43-49 | - |

| | | | - Solving equation | | | | | | | |
|---|---|---|--|------|--|------|------|------|-----------------|---|
| | 2 | | Even numbers Odd numbers Forming and solving equations Finding consecutive numbers | - Do | Finds consecutive even and odd numbers | - Do | - Do | - Do | D | - |
| | 3 | Factors | Listing factors Common factors HCF, GCF | - Do | Lists factors Identifies common factors Finds GCF | - Do | - Do | - Do | Mk old 82-83 | - |
| | 4 | Prime factorization | Using multiplication Subscripts Powers Factor tree Ladder | - Do | Uses factor tree or ladder to prime factorize Writes prime factors accordingly | - Do | - Do | - Do | Mk old 86 | - |
| | 5 | Finding prime factorized numbers | Multiplying Interpreting powers and subscripts Finding prime factorized numbers | - Do | Interprets factors and subscripts correctly Finds numbers correctly | - Do | - Do | - Do | Old mk 86 | - |
| | 6 | Multiples of numbers | Listing multiples c Common multiples LCM Prime factorizing | - Do | Lists /finds LCM Prime factorizing numbers | - Do | - Do | - Do | Old mk 86-87 | - |
| | 7 | LCM and GCF | Prime factorizing Listing prime factors Showing prime factor s 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 | - |
| 7 | 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 factorize 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 | - Do | Finds squares | - Do | - Do | - Do | Mk old 39-40 | |

| 5 | | - Mixed numbers - Decimals | | 81 | | | | |
|---|--------------------------------|---|------|--|------|------|-------|------------------------------|
| | Square roots | Prime factorizing Writing prime factors Finding square roots | - Do | Prime factoises Writes prime factors In multiplication form Finds square roots | - Do | - Do | - Do | New mk 39 Tr's collection |
| 6 | Square roots of fraction | Finding prime factors Changing decimal to common fraction Mixed to common fraction Finds square roots | - Do | Do | - Do | - Do | - Do | Tr's collection |
| 7 | Application of square roots | Forming equations Prime factorizing Finding square roots | - Do | Forms equation Prime factorise Uses square roots | - Do | - D | - Do | Tr's collection |
| 8 | Cube and cube roots | Finding cubes Forming equations Finding cube roots | - Do | Finds cubes and cube roots | - Do | - Do | - Dod | Fountain 49 |
| 1 | Sequences | Identifying types of number Finding number patterns Completing sequence | - Do | Identifies types of numbers Finds pattern numbers Completes the sequences | - Do | - Do | - Do | Do |
| 2 | Puzzle and magic square | Forms puzzles Finding magic sum Completing magic squares | - Do | Forms magic square Completes magic square | - Do | - Do | - Do | Understanding mtc 74 |

| | | | | | □ Tekart | learning Te r | m II | | | |
|---|---|----------|-----------------------------|---|-----------------|---|------|------|------|---|
| 1 | 1 | Fraction | Addition | With same denominators Different denominators Mixed numbers | - Do | Adds fractions with same and different denominators | - Do | - Do | - Do | Fountain 56-57 Understanding mtc 85 |
| | 2 | | Subtraction | With same and different denominators Mixed numbers | - Do | Subtracts fractions correctly | - Do | - Do | - Do | Fountain 58-60 |
| | 3 | | Addition and subtraction | Finding LCD Adding and subtracting fraction | - Do | Finds LCD Adds and subtracts fractions | - Do | - Do | - Do | Fountain 59 |
| | 4 | | BODMAS | Interpreting operation correctly Working out using MODMAS | - Do | Uses BODMAS to work out fractions | - Do | - Do | - Do | Do |
| | 5 | | Multiplication | Whole numbers by fraction and vice versa Fraction by fraction | - Do | Multiplies fraction correctly | - Do | - Do | - Do | Fountain 60-61 |
| | 6 | | Division | Using LCM Using reciprocal Dividing fraction | - Do | Finds reciprocals and divides fractions | - D | - Do | - Do | New mk 46-47 |
| | 7 | | | Fraction by whole numbers and vice versa Fraction by fraction Mixed by mixed fraction | - Do | Divides fractions using LCM and reciprocal | - Do | - Do | - Do | New mk 49-50 |
| | 8 | | Mixed operations | Applying BODMAS Simplifying fractions | - Do | Uses BODMAS and simplifies fraction correctly | - Do | - Do | - Do | Fountain 62-64 |
| 2 | 1 | | Decimals | Adding decimals Adding and subtracting decimals | - Do | Adds and subtracts decimals correctly | Do | - Do | - Do | Old mk 14 |
| | 2 | | | BODMAS on decimals Adding and subtracting | - | Do | | - | - | |
| | 3 | | Multiplication | Decimal by whole numbers and vice versa Decimal by decimal | - Do | Multiplies writes decimals correctly | Do | - Do | - Do | O;dmk 116-118 |
| | 4 | | Division | Changing to common fraction Finding reciprocal Dividing decimals Simplifying | - Do | Changes Simplifies Decimals | Do | - Do | - Do | Fountain 72 |
| | 5 | | Operation on decimals | Changing to common fraction Introducing brackets Adding or subtracting Simplifying decimals | - Do | Workouts decimals with mixed operations | Do | - Do | - Do | New mk 61-65 |

| | 6 | | Word problem | Interpreting word problems Multiplying and dividing decimals | - Do | Interprets and works out word problems | Do | - Do | - Do | Fountain 73-74 |
|---|---|------------------------|--|---|------|---|----|------|-------|------------------------------|
| | 7 | Ratios and proportions | Ratios | Forming ratios Expressing ratios as fractions Fractions as ratios | - Do | Forms ratios correctly | Do | - Do | - Do | Ne mk 66-67 |
| | 8 | | | Quantities as ratios Ratios as fraction and vice versa | - Do | Writes ratios correctly | Do | - Do | - Do | Fountain 77-78 |
| 3 | 1 | | Sharing in ratios | Finding total parts Finding shares | - Do | Finds shares of different parts | Do | - Do | - Dod | Fountain 80-81 |
| | 2 | | Finding shared quantity | Finding total share Finding equivalent of shares Finding the shared quantity | - Do | Fins the quantity shared | Do | - Do | - Do | Old mk 133-135 |
| | 3 | | Increasing and decreasing quantities | Finding fraction of increase and decrease Finding quantity of decrease and increase | - Do | Increases and decrease quantities correctly | Do | - Do | - Do | Old mk 12-130 |
| | 4 | | Ratio of increase and decrease | Expressing quantities as fraction Simplifying fractions Writing ratios in simplest form | - Do | Writes quantities as ratios in simplest form | Do | - Do | - Do | Fountain 79-80 |
| | 5 | | Application of ratios | Applying ratios in solving daily life situations | - Do | Shares quantities using the given ratios | Do | - Do | - Do | Fountain 82-83 |
| | 6 | | Proportions | Direct proportion Constant proportion | - Do | Applies direction proportion and constant proportion | Do | - Do | - Do | Fountain 82-83 |
| | 7 | | | - Indirect and inverse proportion | - Do | Interprets and applies indirect proportion | Do | - Do | - Do | Old mk 71 |
| | 8 | | Percentages | Meaning of %ages %age as fraction Fractions as %ages | - Do | Changes %ages to fractions and vice versa | Do | - Do | - Do | Understanding mtc 113 |
| 4 | 1 | | Decimal as %ages | Decimals as %ages %ages as decimals Ratios as fractions | - Do | Converts decimals to %ages Converts ratios as fraction | Do | - Do | - Do | Do |
| | 2 | | Parts of %ages | Finding parts Forming equations Solving equations | - Do | Finds, forms and solves equations | Do | - Do | - Do | Understanding mtc 115-116 |
| | 3 | | Quantities as %ages | Finding quantities as %age Finding %ages as quantities involving | - Do | Finds equivalent to %age Converts units | Do | - Do | - Do | Old mk 145 |

| | | | | conversion | | | | | _ | |
|---|---|------------------|--|--|------|--|----|------|------|-----------------------------------|
| | 4 | | Quantities as %age of others | Changing to other units Finding the %age equivalent | - Do | Changes units and finds %ages | Do | - Do | - Do | New mk 75-77 |
| | 5 | | Sharing in %ages | Changing %ages to fraction Multiplying %age by quantity | - Do | Changes %age to fraction Shares quantities | Do | - Do | - Do | Old mk 150 |
| | 6 | | Algebra on %age | Forming equation Changing %age to fraction Finding the number shared | - Do | Forms and solves equations | Do | - Do | - Do | old mk 152-153 |
| | 7 | | %age increase and decrease | Increasing Decreasing and finding discount Using %ages Finding quantity of decrease and increase | - Do | Increase S and decreases quantity correctly | Do | - Do | - Do | Fountain 85 |
| | 8 | | Finding %age decrease and increase | Finding quantity of increase and decrease Finding %age increase and decrease | - Do | Finds %age increase and decrease | Do | - Do | - Do | Fountain 86-87 |
| 5 | 1 | | %age profit and loss | Finding profit Finding loss Calculating %age profit and loss | - Do | Finds profit , loss and their %ages | Do | - Do | - Do | Do |
| | 2 | | Simple interest | Identifying principal rate and time Finding simple interest Finding amount | - Do | Identifies and calculates simple interest | Do | - Do | - Do | Fountain 88 New mk 83 |
| | 3 | Data handling | Collecting and organization data | Collecting and recording data Grouping data Tabulating data Drawing a bar graph | - Do | Collects , records, tabulate and draws a bar graph | Do | - Do | - Do | New mk 85-86 Fountain 92 |
| | 4 | | Line graphs | Drawing line graphs Interpreting line graphs Finding scale | - Do | Interprets , draws, and finds scale | Do | - Do | - Do | Fountain 102 Old mk 167-168 |
| | 5 | | Mode, median, mean, range | Finding the mode, median, range and mean | - Do | Finds mode, median, range and mean | Do | - Do | - Do | Do |
| | 6 | | Grouped data | Drawing frequency table Interpreting grouped data Finding mean, mode, median using grouped data | - Do | Draws interprets frequency tables | Do | - Do | - Do | Tr's collection Old mk 172-173 |

| | 7 | Application of mean | Forms equations Collects like terms Finds unknown using mean | - Do | Forms and solves equations using mean | Do | - Do | - Dod | Do |
|---|---|------------------------------------|--|------|---|----|------|-------|--|
| | 8 | | Inverse problem on average Finding totals | - Do | Finds total using average | Do | - Do | - Do | Do |
| 6 | 1 | Pie charts | Drawing pie charts Interpreting and completing sectors | - Do | Draws Interprets and completes pie chars correctly | Do | - Do | - Do | New mk 94-97 |
| | 2 | | Drawing pie charts Interpreting pie charts with %ages Finding unknown sectors | - Do | Draws , finds unknown sector on a pie chart | Do | - Do | - Do | Fountain 93-97 |
| | 3 | | Finding unknown values on the pie chart Form an equation using theequivalent values | - Do | Identifies equivalence and completes the pie chart | Do | - Do | - Do | Tr's collection |
| | 4 | Drawing pie chart | Changing fractions to degrees Changing %ages to degrees Drawing accurate pie chart | - Do | Draws pie chart using degrees | Do | - Do | - Do | New mk 99 |
| | 5 | More about pie charts | Finding total quantity Changing quantities to degrees Drawing accurate pie chart | - Do | Do | Do | - Do | - Do | Old mk 184-188 |
| | 6 | Coordinate graph | Naming axes Plotting and reading plotted points | - Do | Names , plots and interprets coordinate graph | Do | - Do | - Do | Tr's collection |
| | 7 | Coordinate graph | Plotting Joining Naming shape Finding area And perimeter | - Do | Plots, names, shapes, and finds area and perimeter | Do | - Do | - Do | Do |
| | 8 | Money | Identifying different currencies Finding number of notes Finding the amount equivalent to the denomination | - Do | Identifying currencies Finds number of bank notes | Do | - Do | - Do | Doldmk 217-218 |
| 7 | 1 | Local and foreign currencies | Converting local currency to foreign currency Drawing and use of forex rate table | - Do | Converts local currency to foreign currency and vice versa | Do | - Do | - Do | Fountain 117 Understanding mtc 180-181 |

| 2 | Time | Conversion of | | | | | | | |
|---|-------|-----------------------|--|-------|--|---|---|---|--|
| | | time | 12 hr clock to 24 hr clock 24 hr clock to 12 hr clock | - Do | Convers time in 24 hr clock and 12 hr clock | Do | - Do | - Do | Tr's collection |
| 3 | | duration | clock - Finding duration in hrs and minutes | - Do | Converts to 24 hr clock Finds duration in hrs and minutes | Do | | | Olmk 224-225 |
| 4 | | Distance | 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 | time in hours and minute s - Fidning 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 |
| 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 |
| | | | - Finding average speed | | | | | | |
| | 5 6 7 | 4 5 6 7 8 | duration | Clock | Clock Converting to 24 hr Clock Finding duration Converting to 24 hr Clock Finding duration in hrs and minutes | Converting to 24 hr Converting to 24 hr | Converting to 24 hr dock Converting to 24 hr dock | Colock Converting to 24 hr dock Converts to 24 hr dock Finding duration Converting to 24 hr dock Finding duration in hs and minutes Finding distance with hours, minutes and km/hr on duration Finding files and minutes Finding files and hours Finding speed and distance Finding speed using time in hours and minute Finding speed in km/hrs Finding speed in m/sec Finding speed Finding speed | Converting to 24 hr dock Converts to 24 hr dock Finding duration Converting to 24 hr dock Finding duration in hrs and minutes Finding duration in hrs and minutes Finding distance with hours, minutes and kn/hr on duration Finding speed and distance Finding speed and distance Finding speed using time in hours and minutes Finding speed in kn/hrs Do Finds speed using time in hours and minutes Finding speed in kn/hrs Finding speed in kn/hrs Finding speed in kn/hrs Finding speed in m/sec Finding speed in kn/hrs Finding speed speed Finding average speed |

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| 1 | 1 | Lengths, mass and capacity | 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 | | | - M to km - Cm to m - Mm to cm - Cm to km - Cm to dm | - Do | Do | Do | - Do | - Do | Do |
| | 3 | | Perimeter | Finding missing sides Identifying shapes Calculating perimeter | - Do | Identifies shapes and finds perimeter | Do | - Do | - Do | Old mk 320 |
| | 4 | | Area | Identifies shapes Finding area of a square Finding sides of a square using area Using area of a square to find perimeter | - Do | Finds area and perimeter of a square | Do | - Do | - Do | New mk 125 |
| | 5 | | | Finding area of a rectangle Finding length and width using area Using perimeter to find area | - Do | Finds area of a rectangle side | Do | - Do | - Do | New mk 122- 123 |
| | 6 | | Area and perimeter | Identifying equal signs Finding unknown Finding length and width Calculating perimeter and area of a rectangle and square | - Do | Forms and finds unknown length Finds perimeter and area | Do | - Do | - Do | New mk 123- 125 Old mk 334 |
| | 7 | | Difference of area | Finding are of inner and outer shapes Finding shaded or unshaded regions | - Do | Finds area of inner and outer shapes Finds shaded and unshaded regions | Do | - Do | - Do | Old mk 336-337 |
| | 8 | | Triangles | Finding area of a triangle Finding base or height of a triangle | - Do | Finds area, base or height | Do | - Do | - Do | Understanding mtc 267-263 Fountain 135- 136 |
| 2 | 1 | | Comparing area | Identifying base and height of triangles Finding base or height using area | - Do | Identifies base and heights of triangles, Finds base or height | Do | - Do | - Do | Olfmk 342 |
| | 2 | | Combined figures | Finding area of separate figures Calculating area of | - Do | Finds area of combined figures correctly | Do | - Do | - Do | Understanding mtc 258 Old mk 343 |

| | | | | combined figures | | | | | | |
|---|---|--------|--|---|------|---|----|------|------|------------------------------|
| | 3 | | Trapezium | Types of trapezia Properties Finding sides of a trapezium Finding sides of a trapezium using area | - Do | Names types of trapezia Finds area and types of trapezia | Do | - Do | - Do | New mk 128 Old mk 344-346 |
| | 4 | | Parallelogram | Finding area Finding base and height using area | - Do | Finds area and sides of a parallelogram | Do | - Do | - Do | New mk 129 Old mk 347 |
| | 5 | | Rhombus and kite | Stating properties Finding area of a kite Calculating | - Do | States properties and calculates area | Do | - Do | - Do | New mk 130 |
| | 6 | Circle | Circumference | Finding radius and diameter Identifying pie Calculating circumference | - Do | Names parts of a circle and finds circumference | Do | - Do | - Do | New mk 133 |
| | 7 | | Perimeter and circumference of sectors | Identifying radius and diameter Finding circumference Calculating perimeter | - Do | Identifies radius and diameter Finds circumference and perimeter of sector s | Do | - Do | - Do | Do |
| | 8 | | Area | Identifying radius Finding area using 22/7 or 3.14 Finding area of some sectors | - Do | Identifies radius and finds area of circles and some sectors | Do | - Do | - Do | DI |
| 3 | 1 | | TOTAL surface area | Identifying prisms Calculating TSA | - Do | Identifies s prisms and finds the total surface area | Do | - Do | - Do | Old mk 348-351 |
| | 2 | | Sides of a cube and cuboid | Forming equations using TSA Applying TSA to find sides and volume | - Do | Uses TSA to find sides and volume of cubes and cuboid | Do | - Do | - Do | New mk 137 |
| | 3 | | Cylinder | Naming parts Identifying radius Finding volume using base area and height | - Do | Names, identifies and finds volume | Do | - Do | - Do | Old mk 356-360 |
| | 4 | | Capacity | Finding volume Finding capacity using volume | - Do | Finds volume and capacity | Do | - Do | - Do | Fountain 139- 141 |
| | 5 | | Application of volume and capacity | Changing capacity to volume Suing volume to finds sides Calculating capacity | - Do | Changes capacity to volume Uses volume to find sides Calculates capacity | Do | - Do | - Do | Old mk 359-360 |
| | 6 | | Capacity | - Litres to ml - L to cm ³ - Ml to l | - Do | Changes litres to milliliters Litres to cm ³ and | Do | - Do | - Do | Old mk 360-364 |

 $\qquad \qquad \textbf{Tekart learning}_{0754895241/0783298434} \\ \texttt{©} \\ \text{SCHEMES}$

| | | | | - Cm³ to I | | vice versa | | | | |
|---|---|----------|--------------------------------|---|------|--|----|------|------|---------------------------------------|
| | 7 | Geometry | Shapes and lines | Types of lines Drawing and measuring lines segments Drawing parallel lines Constructing perpendicular lines | - Do | Draws, measures lines Constructs lines | Do | - Do | - Do | Fountain 152- 153 |
| | 8 | | Angles | Drawing and forming angels Measuring angles using different scales | - Do | Draws, forms and measures angels | Do | - Do | - Do | Fountain 147- 151new mk 147-149 |
| 4 | 1 | | Bisection of angles | Bisecting lines at a point Dropping bisectors Bisecting given angles | - Do | Bisects and draw lines | Do | - Do | - Do | Fountain 147- 151 |
| | 2 | | Constructing angles | Drawing lines Constructing ARCs Showing angles Constructing angles | - Do | Draws, constructs angles | Do | - Do | - Do | New mk 147- 149 Old mk 288-291 |
| | 3 | | Constructing polygons | Types of triangles Drawing sketch Drawing lines Measuring lengths Constructing triangles with SSS | - Do | Draws, sketch lines and triangles | Do | - Do | - Do | Understanding mtc 237 |
| | 4 | | Constructing triangles | Drawing sketch Drawing and measuring sides Constructing angles Constructing a triangle with SAS.SSA and ASS | - Do | Draws, measures lines and angles | Do | - Do | - Do | Understanding mtc 230-231 |
| | 5 | | | Drawing sketch Measuring one side Constructing two angels Constructing a triangle with AAS | - Do | Measures and constructs triangles | Do | - Do | - Do | Do |
| | 6 | | Constructing quadrilaterals | Square, rectangle State properties Find the diagonals | - Do | Constructs a square, rectangle and state the properties | Do | - Do | - Do | Tr's collection |
| | 7 | | | Hexagon, octagon and pentagon Finding centre angel Finding perimeter | - Do | Constructs, hexagon, pentagon, and octagon correctly | D | Do | - Do | Fountain 155- 156 New mk 165 |
| | 8 | | Properties of polygons | Equilateral triangles Isosceles triangles Scalene triangles Right angled triangles Square, parallelogram Trapezium and kite | - Do | States properties of polygons | Do | Do | - Do | Tr's collection |

| 5 | 1 | Pythagoras theorem | Proving Pythagoras theorem Finding hypotonus height and base using Pythagoras theorem | - Do | Applies Pythagoras theorem correctly | Do | Do | - Do | Fountain 157 Old mk 299-300 |
|---|---|---|---|------|---|----|----|------|--------------------------------|
| | 2 | Application of Pythagoras theorem | Finding equal sides of isosceles triangle Substituting Finding the base, height and hypotonus Calculating area and perimeter | - D | Finds sides of an isosceles Finds its base , height and hypotonus | Do | Do | - Do | Tr's collection |
| | 3 | Types of angles | Right angels Acute , reflex and centre Supplementary and complementary angles | - Do | Identifies and finds complements and supplements of angles | Do | D | - Do | Fountain 146 |
| | 4 | Supplementary angels | Unknown supplementary angles Forming equations Angels in the triangle Finding supplements | - Do | Finds supplements of angles | Do | Do | - Do | New mk 144 |
| | 5 | Angels on parallel lines | Drawing parallel lines in sketch form Drawing transversal line Co-interior angels Co-exterior angels | - Do | Draws parallel lines, Identifies co-interior angels and co exterior angels | Do | Do | - Do | Old mk 267-273 |
| | 6 | | Alternate interior angles Alternate exterior angles Corresponding angles Vertically opposite angles | - Do | Identifies the angle properties on parallel lines | Do | Do | - Do | Tr's collection |
| | 7 | Angle properties | Equilateral triangle Isosceles triangle The sum of two interior angles is equal to its opposite exterior angels | - Do | Applies the angle properties on triangles | Do | Do | - Do | Tr's collection |
| | 8 | Number of sides | Finding exterior angels and interior angels Finding number of sides of regular polygons Naming polygons | - Do | Finds exterior and interior angels Names and finds number of sides | Do | Do | - Do | Tr's collection |
| 6 | 1 | Interior angle sum | Finding interior angle sum Finding a number of sides Calculating interior angel sum Naming polygons | - Do | Find the number of sides and interior angle sum | Do | Do | - Do | Tr's collection |

| | 2 | Integers | Number line | Additive inverse Naming arrows Drawing arrow Drawing a number line Finding inverse | - Do | Draw, names and finds additive inverse | Do | Do | - Do | Old mk 197-198 |
|---|---|----------|-------------------------|---|------|---|----|----|------|--------------------------------|
| | 3 | | Ordering integers | Comparing integers Ascending order Descending order | - Do | Compares and arranges integers | Do | Do | - Do | New mk 168- 167 |
| | 4 | | Addition | Positive to a positive Positive to a negative Negative to a negative Negative to a positive Using a number line | - Do | Adds integers with or without a number line | Do | Do | - Do | Tr' collection |
| | 5 | | Subtraction | Positive from a positive Positive from a negative Negative from a negative Negative from a positive Using a number line | - Do | Subtracts integers with or without number line | Do | Do | - Do | Tr's collection |
| | 6 | | Multiplication | Finding groups Showing groups on a number line Multiplying integers with or without a number line | - Do | Multiplies integers correctly | Do | Do | - Do | Old mk 205 |
| | 7 | | Solution sets | Drawing a number line Interpreting set of integers Showing set of integers on a number line Finding solution sets | - Do | Finds the solution set | Do | Do | - Do | Old mk 207-210 |
| | 8 | | Inequalities | Solving inequalities Showing on a number line Finding the solution set | - Do | Solves and finds solution sets correctly | Do | Do | - Do | Do |
| 7 | 1 | Algebra | Algebraic expression | Writing phrase Adding , subtracting , multiplying , dividing and use f brackets | - Do | Uses different operations to write algebraic expression | Do | Do | - Do | Fountain 187 Old mk 374-375 |
| | 2 | | Substitution | Expanding algebraic expression Substituting Finding values | - Do | Expands, substitute and finds values | Do | D | - Do | New mk 180- 183 |
| | 3 | | Like terms | Collecting like terms Simplifying like terms Applying perimeter Finding perimeter | - Do | Collects and simplifies like terms | Do | Do | - Do | Do |
| | 4 | | Removing brackets | Multiplying Substituting Simplifying Finding values of | - Do | Removes brackets Substitutes and simplifies | Do | Do | - Do | Fountain 188- 189 |

| | | | unknown | | | | | | |
|---|---|------------------------------------|---|------|---|----|----|------|------------------------------|
| | 5 | Forming equation | By adding Subtracting and multiplying | - Do | Forms different equations \solving equations | Do | Do | - Do | Ldmk 380-381 |
| | 6 | Solving equation by dividing | Forming equations Collection like terms Simplifying like terms Finding unknown Solving equation | - Do | Forms, collects, simplifies and solves equation | Do | Do | - Do | New mk 184- 185 |
| | 7 | Fractional equation | Collecting like terms Finding LCD Solving equation Finding unknown | - Do | Collects like terms And solves equations | Do | Do | - Do | New mk 186 |
| | 8 | Application of algebra | Using area of a square, rectangle, and triangle Using perimeter of a square, rectangle and triangle | - Do | Applies area and perimeter using algebra | Do | Do | - Do | New mk 188- 189 |
| 8 | 1 | Equations with brackets | Removing brackets Collecting like terms Solving Finding unknown | - Do | Removes, collects and solves equation | Do | Do | - Do | New mk 199 Old mk 395-396 |
| · | 2 | Application of algebra | Identifying properties of polygon Forming equation Solving equation Finding sides area and perimeter of polygon | - Do | Forms, solves, and finds area of different polygons | Do | Do | - Do | Tr' collection |