**P.5 MATHEMATICS SCHEME OF WORK FOR TERM I**

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| Wk | Pd | Topic  | s/topic | Content | Subject competences | Language competences | Methods | Life skills | Teaching aids | Teaching act | Ref |
| 1 | 1 | Set concept  | Types of sets | Definition of a setEquivalent setsEqual setsJoint and disjoint setsMatching setsEmpty sets | Defines a setIdentifies different types of sets | Names different types of sets Pronounces Spells andConstructs sentences | Discussion Demonstration Illustration Explanation | Critical thinkingCreative thinkingEffective communication | Real objects Coins TinsPens Books | Drawing Oral Discussion Written exercises Collecting materials | Mk old edition pg 1 – 25Mk new edition pg 1 – 22 Function MTC 1 – 15  |
|  |  |  | Sets and Venn diagrams Difference of setsShading and describing regionsNumber of elements Sub sets | Union of setsIntersection of sets Representing union and intersection sets on Venn diagrams Difference of sets (complement)Shading regions Describing shaded regionsNumber of elements Defining subsets Listening subsets Finding number of subsets Representing subsets on a Venn diagram | Forms sets Shades regions Represents union and intersection on Venn diagramsLists sub setsFinds number of subsets  | Spells Pronounces Makes sentences using words like union intersection |  |  |  | Forming and drawing Drawing venn diagrams Identifying members of union and intersection set on the venn diagram Drawing venn diagram and using them  | P. 5 curri pg 85-86 |
| 2 | 1 to 6 |  | Probability | Place coins Rolling a diceColoursDays of the week | Tosses a coin Rolls a dice | Writes the sample space Finds the probability  |  |  |  |  |  |
| 2 | 1 to 6 | Whole numbers | Place values Values of digitsWriting in figures and wordsForming numbers from digits | Place values of whole numbers upto millionsValues of digits up to 999999Writing in figures and words up to 9999999Forming numbers from digits | Identifies place values Finds values of digitsWrites numbers in words and in figuresForms numbers from digits  | Names place values up to millionsReads numbers in wordsWrites expanded numbers in words Reads and writes Roman numerals  |  | Critical thinking Problem solving  | A chart showing place values and values of numbers | Identifying place values up tot six digits Working out values of digitsRounding of whole numbers Reading and writing roman numerals Converting Hindu Arabic numeral and vice versa  | Mk old edition pg 28 – 57Mk new edition 24 – 29Functional MTC for Ugpg 17 – 43Pri curri 87-88 |
| 3 | 1 to 6 |  | Expanded notationRounding off whole numbers Roman numerals | Expanding numbers using values, multiples of 10 place values and powers of 10Changing from expanded to single numbers Rounding off whole numbers up to 10000Roman numerals up to 1000Roman to Hindu and vice versa | Expands six digit number Rounds off whole Rounds off whole numbers to ten thousandsReads and writes Roman numbers up to 1000 |  | Guided discussion Explanation Illustration Guided discovery Group work  |  |  |  |  |
| 4 | 1 to 6 | Operation on whole numbers  | Addition of whole numbersSubtraction of whole numbers Multiplication of whole numbers Division of whole numbers by two digit numbers | Addition of whole numbers up to six digits without regroupingAddition with regrouping Word problems involving addition Subtracting upto six digits without regroupingSubtraction with regrouping Word problems Involving subtraction ]Multiplication by two digit numbers Word problems Involving multiplication Dividing numbers without remainders Dividing whole with remaindersWord problems involving division | Adds whole numbers up to 6 digits without regrouping and with regrouping Solves word problemsSubtracts whole numbers up to 6digits solves simple word problems Multiplies numbers up to 4 digits by 2 digit numbers Divides whole numbers by 2 digit numbers with or without remainder  | Spells the word addition Pronounces Spells the word additionUse addition sentences Uses other terms correctly for subtraction such as decrease , takeaway, minus or less than in sentences  | Discussion Explanation IllustrateDemonstrationInquiry Role paly | Critical thinkingEffective communicationProblem solving  | WorkCards Counters Books | Computing problems involving addition Subtraction Multiplication Division Solving simple word problems in real life situation | Mk old edition pg 58 – 95 New Mk pg 47 – 76Understanding MTCbk 5 pg 37 – 59Functional MTCbk 5 pg 45 – 80 Pri five curri pg 88-89  |
| 5 | 1 to 6 | Whole numbers | Mixed operations Statistics | Use of BODMASFinding mode of given data Working out median of given dataFinding mean/averageFinding range comparing numbers using symbols >, <, = comparing average and total | Uses operations of (+, -, x and ÷) to solve problems in real life situationsFinds, mode, median, mean and range Compares average and total  | Spells words Mode Median Average Range Use words above in sentencesInterpreting problems involving four basic operation  |  |  | Reading and solving real life problem  |  |  |
| 6 | 1 to 6 |  | Numbers in base five Bases 5  | Grouping in base five and tenPlace value of basesWriting bases in words Expanding in bases 5,Changing from bases 5, to base ten.Changing from base ten to 5,addition of bases 5, Subtraction of bases 5Multiplication  | Counts in base five two and sevenAdds in bases 5, Subtracts in bases 5,Multiplies numbers in bases 5, | Spells words BaseExpand Five Seven etcPronounces words above | Guided discussion Demonstration Group workExplanation | Critical thinking Problem solving  | Counting Computing problem involving addition, subtraction and multiplication of numbers in bases  | Prepared charts Counters  |  |
|  |  |  | Finite system | Counting in figure five and sevenExpressing numbers in finite five and sevenAddition and subtraction using a dialAddition and subtraction without using a dial | Adds using a dial and without using a dial |  |  |  |  |  |  |
| 7 | 1 to 6 | Patterns and sequences | Divisibility tests Multiples of numbers LCMFactors GCFPrime and Composite numbers | Divisibility tests of 2, 3, 4, 5, 10Multiples of given numbers Finding LCMFinding factors of numbers Finding GCFDefinition of prime and composite numbers | Forms patterns using increasing and decreasing progression Identifies triangular, square composite numbers andPrime numbers Works out LCM and GCF | Spells words Divisibility Multiples Factors Pronounces the above words Uses above words in sentences | Discussion Questions and answer Group workExplanation | Critical thinking Creative thinking Problem solving  | Work cards ChartsPrepared charts  | Identifying and listing types of numbers Listing factors and multiples of numbers Finding the LCM and GCF | Mk new edition bk 5 pg 77 – 92 Functional MTCpg 85 – 107 Pri five curri pg 90-91 |
| 8 | 1 to 6 |  | Prime factorizationSquare numbers Square rootsSets of numbers Magic squares | Use of factor tree and ladder to prime factoriseFind LCM and GCF using prime factorsFinding squares of numbers Finding square roots Application of square roots Natural odd, even, prime triangular numbers Numbers sequences Operation on patterns (sum, difference, product) Completing magic squares | Uses types of numbers to form number patterns and sequences Describes and solves number patterns and sequences Completes magic squares correctly  | Do | Do | Do | Do | Finding LCM and GCF using prime factorisation and solve number patterns |  |
| 9 | 1 to 6 | Fractions  | Types of fractions Equivalent fractions Reducing fractions Ordering fractions Comparing fractions Operation on fractions  | Definition of fractions Types of fractions Finding equivalent fractions Reducing fractions Ordering fractions Comparing fractions using >,< or = Adding fractions with different denominators Addition of whole numbers to fractions Adding mixed fractions Word problems in addition of fractions | Adds fractions with different denominators Reduces fractions Orders fractions Finds equivalent fractions  | Spells words Fraction Equivalent Denominators Uses above in sentences | Explanation IllustrationQuestion and answer Group workGuided discussion  | Effective communication Problem solving  | Work cards c/billustration | Adding fractions with different denominators Answering oral questions and written exercisesSubtracting of fraction with different denominators  | Mk new edition pg 45 – 48Function MTCbk 5 pg 141 – 166Understanding MTCbk 5 pg 60 – 96  |
| 10 | 1 to 6 |  | SubtractionMultiplication  | Subtraction fraction with same denominatorSubtraction with different denominator Fractions from whole numbers Subtracting mixed fractions Mixed operation (+ & -)using BODMASMultiplying wholes and fractions using repeated addition Multiplying fractions by natural numbers Multiplying fractions by fractions Multiply mixed fractions Application of fractions (use of “of”) | Subtracts fractions with different denominators Multiplies fractions by proper fractions Multiplies fractions by natural numbers Multiplies fractions by fraction  | Reading and solving fractions involving subtractions reading and solving fractions involving multiplication of fractions  | Guided discussion Discovery Group work Demonstration  | Effective communication Problem solving  |   | Dividing proper fraction by proper fractions Dividing fractions by natural numbers  | Do |
| 11 | 1 to 6 |  | Division of fractions  | Finding reciprocals of whole numbers Finding reciprocals of fractions Finding reciprocals of mixed fractions Dividing fractions using LCM and reciprocals.Division of whole numbers by fractions Division of fractions by whole numbers Dividing fractions by fractions Dividing mixed fractions by mixed fractions Word problems involving division of fractions | Divides proper fractions by proper fraction Divides fractions by natural numbers and vice versa Interprets and solves problems in real life situation  | Reading words Spells words reciprocals Reading and solving problem s involving division of fractions  | Do | Do | Do | Do | Do |
|  |  |  | **Term**  | **Two**  |  |  |  |  |  |  |  |
| 1 | 1 to 7 | Decimal fractions | Place values of decimals Values of decimals Decimals in figures and wordsExpanding decimals Common fractions in decimals Mixed fractions as decimals Decimals to common fractions  | Place values of decimals upto thousandths Values of decimals upto hundredths Decimals in figures and words upto ten thousandthsExpanding decimals using values and powers Finding expanded numbers (single numbers)Changing common fractions to decimals Changing mixed fractions to decimalsChanging decimals to common fractions  | Identifying place values of each digit up to thousandth Finding values of digits in decimals Converting decimals to fractions and vice versaAdds and subtracts decimals Solves word problems  | Naming place values Reading and writing values of decimals in words. Reads aloud and solves problems Involving decimals Reading and interpreting word problems  | Discussion Demonstration Discovery Participatory learning  | Effective communication Problem solving  | Work cards Chalk board illustrations  | Finding place values of digits in numbers Converting decimals into fractions Ordering decimals using a number line Adding and subtracting decimals  |  |
| 2 | 1 to 7 |  | Comparing decimals Ordering decimals Operations on decimals (+, -, x, ÷) | Comparing decimal using symbols(>,< or =) Ordering decimal fraction decimals addition of Subtraction of decimals Multiplication of decimals (simple decimals) Division of decimalsWord problems in decimals Rounding off decimals | Comparing decimals using (>,<, or=) Ordering fractions (decimal)Operation on decimal fraction (+, -, x,÷) | Reading and interpreting word problems involving decimals | Do | Do | Do | Answering oral and written exercises |  |
|  | 1 to 10 | Measurement  | Money | Simple rates and proportions Buying and selling Buying price Selling price Profits and lossShopping billCompleting bill tables Transport charges | Solves practical problems related to buying and selling using Uganda Currency Uses practical examples to describe simple profits and loss | Describe profits gain loss and other related termsRole by plays Buying and selling  | Demonstrations Explanation Guided discovery  | Problem solving Logical thinking Effective communication Creative thinking  | Price list chartUganda currency notes | Computing and solving problems related to profit and loss.Role play buying and selling | p.5 curri pg 100-101 |
|  | 1 to 101 to 10 |  | TimeTime tables Distance Speed Time  | Telling time in am and pmHours to minutes and vice versa Addition and subtraction of timeFinding duration Interpreting time tables Finding distance, time and speed | Tells time in 12hr clockFinds duration Solves problems related to speed, distance and time Recognizes minutes and seconds  | Constructs phrases involving time Explains the meaning of am and pmReds and tells time verbally on the 12 hours clock  | Do  | Effective communication Decision making Problem solving  | Clock Time table Charts  | Reading and telling time up to the seconds Working out duration Calculating speed Distance And time  |  |
|  | 1 to 12 | Geometry  | Parallel lines perpendicular lines Intersecting lines polygons Lines of folding symmetry Circles Triangles Hexagons SquaresRotation and revolution  | Definition of parallel and perpendicular lines Drawing parallel lines intersecting liens Drawing perpendicular lines Construction of circles Constructing regular polygons in a circle Equilateral triangles Regular hexagonAn equilateral triangle without a circleConstructing a square Types of triangles Examples of quadrilateral Other polygons Folding lines of symmetry | Identifies and draws parallel intersecting and perpendicular lines Constructs triangles , circles and regular hexagons Describes lines of folding symmetryDraws and measures angles  | Describes parallel lines intersecting and perpendicular lines polygons Labels angles Reds and writes sentences about the angels Describes the parts of circles  | Do | Do | Ropes Sticks Geometry tools | Constructing linesGeometrical instruments Constructs polygons Folds various models to recognize and identify lines of folding symmetry  | Mk bk 5 pg 175 – 197 |
|  | 1 to 8 |  | Angles  | Angles and revolutions Angles on a compassTypes of angles Measuring angles using a protractor Drawing angles using a protractor Clockwise and anticlockwise directions Complementary and supplementary angles, Interior angles  | Draws and measures angles Draws diagrams to show rotation and revolutions Names examples of rotations Follows instructions to draw rotations and revolutions  | Reads and spells words revolutions protractor Supplementary Writes sentences using the above words  | Do | Do | Do | Constructs rotations using their toes  | Do |
|  |  | Data handling  | Picto graph | Pictograph interpretation Drawing pictographs Reading and interpreting tables Drawing and interpreting tables Drawing bar graphs from tables Bar graph interpretation Recording information from a bar graph into a table  | Draws and recognizes scales on the horizontal and vertical axesRepresents and interprets data on bar and line graph Determines and uses the average of bar and line graphs  | Pronounces Horizontal Vertical Axis Graphs Spells words Horizontal Vertical AxisGraphs Reads and interprets information on bar and line graphs  | Discussion Guided discovery Explanation | Effective communication Critical thinking  | A chart showing bar or line graph | Drawing graphs Representing Interpreting data on graphs Working out average of given data | New mkbk 5 pg 214 to 231P.5 curri pg 97-98 |
|  |  |  | Temperature | Describing temperature Instruments to measure used to measure temperature Drawing the thermometer Units used to measure temperature Reading minimum and maximum temperature Word problems on temperature Reading temperature on a graph | Describes temperature Draws a thermometerRecognizes units of temperature Draws temperature bar graphs  | Pronounces Temperature DegreesSpells Temperature Degrees Use temperature in sentences Reads  | Group discussion Discovery Explanation  | Effective communication Problem solving  | Thermometer Charts  | Describing temperature Reading and interpreting graphs on temperature  | A new mk bk5 pg 233 – 236 Understanding MTCbk 5 pg 190 – 193  |
| **P.5 MATHEMATICS Term Three** |
| 3 |  | Measurements  | Length, Mass and capacity  | Units used to measure length Estimating length Measuring length of objectsConversion of units e.g. cm to mm and vice versa.M to cm and vice versaKm to m and vice versa | Converting mm to cm Cm to mKm to mAnd vice versa | Constructing sentences using mm, cm, m, km  | Guided discovery Discussion Explanation  | Logical thinking Effective communication Problem solving  | Ruler BooksStickMetric tables  | Converting cm to m M to k and vice versa | Mk new edition pg 151 – 156 Functional MTC bk5 pg 161 P.5 curri pg 94-95 |
| 4 | 1 to 2 |  | PerimeterArea | Perimeter of figures Triangles, rectangles, squares, pentagon, hexagonCombined figures Area of figures triangles, rectangles, squares, combined figures Difference in area  | Calculates perimeter and area of figures | Reads and interprets perimeter and area | Do  | Do |  Do | Calculating perimeter and area of figure  |  |
| 5 | 1 to 10 |  | Volume Total surface areaCapacity Weight (mass) | Volume cuboid and cubes Application of volumeTotal surface area of a cuboidUnity for capacity Litres to ML/cm3 and vice versaDescribing mass or weight Basic units of mass Kg to gm and vice versa | Solving problem involving volume and total surface area | Reads and interprets word problem involving volume, total surface area, capacity and mass | Demonstration Discovery Explanation  | Do | Boxes Container Cups Jerry cans etc | Working out problems involving volume TSA capacity and mass | New mk bk5 pg 161 – 163Understanding MTC bk5 pg 161 |
| 1 | 1 to 10 | Integers | Positive and negative integers Inverse of integers Operation on integers Ordering integersComparing integers Simple word problems  | Defining integersIdentifying positive and negative integers Representing integers on a numberlineOrdering integers Comparing integers Finding inverse of integersAddition of integers using a number line Subtraction of integers using a number line Forming mathematical sentences Addition of integers without a number line Subtraction of integers without a number line  | Draws number lines Identifies positive and negative integers Arranges integers Compares integers using >,< or = Adds integers Subtracts integers Solves simple word problems  | Pronounces integersSpells the word integers Positive and negative Uses the words Greater thanLess thanEqual to Reads word problems involving integers | Demonstration Discussion Explanation Discovery | Problem solving Critical thinking  | Charts showing into  | Adding and subtracting integersUsing number lines to describe negative and positive Writing integers in ascending and descending order Comparing integers using symbols  | Mk new edition bk5 pg 95 – 114Mk new edition bk 6 pg 103 – 111Functional MTCbkpg 109 – 121  |
| 2 | 1 to 12 | Algebra  | Collecting like terms Substitution Forming algebraic expressions Solving equation Forming and solving equations  | Forming algebraic expression Collecting like termsSubstitution Solving equations by Subtracting Adding Word problems involving subtraction and additionSolving by dividing Solving by multiplying Word problems involving division and multiplication  | Forms algebraic expressionsCollect like terms Solves simple equations\Forms algebraic equations Collects like terms Solves simple equations  | Pronounces substitution Equations Spells Like terms Uses substitution and equation in sentences | Do  | Do | Chalk board illustrations | Forming algebraic expressions Collecting like terms Solving simple word problems  | Mk bk5 pg 271 – 283 |
| 3 | 1 to 10 | Algebra | Removing brackets Mixed equations Equations involving squares | Solving equations involving squares Solving equations involving squares and square roots Application of algebraic PerimeterArea Volume | Solves simple word problemsApplying algebraic in volume, area, and perimeter | Pronounces Brackets Equations Squares Spells Brackets Equations Squares  | Do | Do | Do | Solving simple and problems Oral and written exercises | Mk bk 5 pg 280 – 287  |