**P.6 MATHEMATICS SCHEME TERM 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **PD** | **TOPIC** | **SUB-TOPIC** | **SUBJECT COMP.** | **LANG. COMP.** | | | **CONTENT** | **METHOD** | | **ACTIVITIES** | **T/LAIDS** | | **REF** | **REM** | |
| 1 | 1 | Set concept | Equal and equivalent sets | **The learner;**  Defines a set  Describes equal equivalent sets  Gives examples  Draw symbols for equal equivalent sets | **The learner;**  Reads, writes, pronounces and spells the words  Equal  Equivalent  Equator  Same  Number  Demand  Objects | | | A set is a collection of well defined objects  **Equal and equivalent sets**  Equal sets are sets with same number of elements which are exactly the same  The symbol of Equal sets is “=”  Equivalent sets are sets with the same number of elements but with different elements.  The symbol for equivalent sets is “ ” | Explanation  Guided discussion  Demonstration | | Identifying objects  Sorting objects  Comparing objects | Leaves  Stones  Bottle tops  Bean seeds | | New MK Primary MTC books page 1 – 2 |  | |
|  | 2 |  | Unequal and non-equivalent sets | Defines an equal and non equivalent sets  Compare unequal sets  Compare non equivalent sets  Examples of sets mentioned above | **The leaner;**  Reads, writes, pronounces and spells unequal, non equivalent sets | | | **Unequal sets**  Unequal sets are sets with the same members but different number of members .  Symbols of unqual is =  **Non equivalent sets**  These are sets with different member of elements and of different kind .  The symbol is | Explanation  Guided discussion  Brian storming  Guided discovery | | Identifying objects  Comparing sets | Leaves  Stones  Bottle tops | | Fountain book page 1 – 3  Understanding MTC book 6 pg.1 – 2 |  | |
| **Note:** Unequal sets are sets with same type of elements but different number of elements. | | | | | | | | | | | | | | | | |
|  | 3 | Set Concept | Universal set | **The learner;**  Defines universal set  Describes universal set  Draws the symbol for universal set  Identifies and list elements in universal set | | **The learner;**  Reads, writes, spells and pronounces universal set, symbol elements | **Universal sets**- This refers to all members (elements) that belong to the given sets  The symbol is “ ∑ ”  **Examples**  Given that set Q =(All pupils in P.6)  Represent this on a venn diagram  Q=(∑)  P  Girls in t All pupils in P.6  P.6 | | Explanation  Guided discussion  Problem solving | Identifying sets  Comparing sets | | Leaves  Bottle tops  Bean seeds | Fountain MTC book 6 page 2-3 | | |  |
|  | 4 |  | Intersection and union sets | **The learner;**  Defines intersection and union set  Identifies elements in intersection and union set | | **The learner;**  Reads, writes, pronounces and spells union intersection set | **Intersection set -**  A set of elements common to two or more sets  **Union set –** A set of elements that contains two or more given sets.  The symbol for intersection set is “ ”  The symbol for union set is “ ”  **Examples**  List the members of  i)M ii)N  iii) MN iv) M N  **M N**  a d f i) M =(a,b,c,d,e)  b e g ii) N=(d,e,f,g,h,i)  c h i iii) MN = (d,e)  iv) MN= (a,b,c,d,e,f,g,h,i) | | Explanation  Guided discovery  Brain storming | Identifying objects  Listening objects | | A chart showing objects on a universal set | Understanding MTC book 6 page 4 – 7 | | |  |
|  | 5 | Set concept | Complement of sets | **The learner;**  Defines complement of sets  Identifies elements of complement of sets  Draws and shades regions of complement  Lists elements in the regions of complement | | **The learner;**  Reads, writes, spells and pronounces complement, shade, identify | **Complement of sets -** A complement of a set means members of the universal set which do not belong to any of the given regions.  The symbol of complement of sets is “ **I**”  e.g. A**1** means complement of A.  Describe the shaded region  Shade (AB)**1**  **P Q A B**    Q**1** | | Guided discussion  Group work  Explanation | Identifying given sets  Shading regions of complement  Listing elements in required regions | | Balls  Cups  Plats  Papers  Oranges  Mangoes | New MK book 6 page 8 – 9  Functional MTC book 6 page 4 – 5 | | |  |
| 2 | 1 |  | Difference of sets | **The learner;**  Identifies members in given sets  Lists members under difference of sets in given sets  Describes shaded regions | | **The learner;**  Reads, writes, spells and pronounces the words like difference belong, found not members | If set  P = (a, b, c, d, e) and  Q = ( d, e, f, g, h)  Find ( P – Q )  ( P – Q) = (a, b, c)  P – Q or P only or Q**1**.  **X Y**  1 4  2 6  7 5  i) X – Y = (1, 2, 7)  ii) n (Y – X)  Y – X = (4,5)  n (Y – X ) = 2  **Activity**  Describe shaded regions  **P Q**  =\_\_\_\_\_\_\_\_\_\_\_  **X Y**  =\_\_\_\_\_\_\_\_\_\_\_ | | Guided discussion  Group work  Explanation | Identifying given sets  Describing shaded regions  Listing elements in required regions | | A chart showing different sets | MK book 6 page 11 –13-15 | | |  |
|  | 2 | Set concept ` | Sub sets | **The learner;**  Defines sub sets  Forms subsets  Writes the symbol of subsets  Finds number of subsets | | **The learner;**  reads, writes, spells and interprets the new words subsets form, symbol | A subject is a small set got from the big set (universal set)  The symbol is “**C**”  **Example**  Set A = (0, 1, 2, 3, 4) B= (1, 2, 3)  Describe sets A and B  A = (0, 1, 2, 3, 4) B =( 1 , 2, 3 )  **A**  **B**  0 1  4 2 3 | | Explanation  Guided discussion  Guided discovery | Identifying elements  Listening elements | | Balls  Plates  Cups  Stones | MK book 6 page 18 – 19  Fountain book 6 page 13 – 14 | | |  |
|  | 3 |  | Forming subsets | **The learner;**  Forms subsets  Gives the numbers of subsets | | **The learner;**  Reads, pronounces, writes and spells the words  Member  Elements  Brackets  Empty | **Note**  An empty set and the set itself are subsets of every set.  The list begins with an empty set ends with a set itself.   |  |  |  |  | | --- | --- | --- | --- | | **Set** | **No. of elements** | **List of subsets** | **No. of subsets** | |  | NIL  1  2 | ,  , ,, | 1  2  4 | | | Explanation  Guided discovery  Group work | Forming subsets  Giving number of subsets | | A chart showing formation of subsets | Functional MTC book 6 page 8 – 9  Fountain book 6 page 13 – 14 | | |  |
|  | 4 |  | Finding numbers of subsets ad proper subsets | **The learner;**  Finds the number of subsets  Finds the number of proper subsets | | **The learner;**  Reads, pronounces and spells words  Subsets  proper  number | Set P has 8 subsets . How many elements does it have?  2**n** = 8 2 8  2**n**  = 2**3** 2 4  n = 3 2 2  1  8 subsets. How does it have?  **3 elements** | | Explanation  Guided discovery  Group work | Finding number of subsets and proper subsets | | A chart showing subsets and proper subsets | MK book 6 page 20 – 12  Functional MTC book 6 page 9-10 and 15 – 18 | | |  |
|  | 5 | Set concept | Drawing and representing information on a venn diagram | **The learner;**  Identifies elements in the sets  Puts the information on the venn diagram  Draws a venn diagram and put information on the venn diagram | | **The learner;**  Reads, pronounces, spells and writes the words  information  draw  number  region  elements | Given that  n(A) = 10, n(B)=15 and n(AB)=6  Draw a venn diagram  ∑ = 19  n(A) =10 n(B)=15  4 6 9  n(A) only  10-6=4  n(B) only  15-6=9  B Find  i) n ( A – B )  10 – 6 = 4  ii) n ( B – A)  15 – 6 = 9 | | Problem solving  Group work  Guided discovery | Find number of elements  Fill information on venn diagrams | | A chart showing number of elements | MK book 6 page 22 – 25 | | |  |
| 3 | 1 |  | Use of venn diagrams to solve problems | **The learner;**  Read and interpret questions  Forms equations  Solves equations | | **The learner;**  Reads, writes, pronounces and spells words  Equation  Solve | There are 60 pupils in a class. 30 pupils like Maize (M), 40 pupils like cassava (C) and 7 pupils like both how many pupils like  i) Both cassava and maize?  ii) Cassava only?  iii) Maize only?  ∑ = 60  M =30 C=40  30-y y 40-y  n(M) only  30 - **-**1  n(C) only  40 - **-**1  n(M n C)  Y  30 – y + y + 40 = y = 60  30 + 40 – y = 60  70 – y = 60  70 - 70 – y = 60 – 70  **-**y = **-**10  **-**1  **-**1  **Y** = 10  10 pupils like both Cassava and maize | | Problem solving  Guided discussion  Explanation | Drawing venn diagrams  Find those who like both  Forming equations | | A chart showing number of elements solving for unknown or those who like both | Fountain book 6 page 16 – 18  MK primary book 6 page 8 – 9 | | |  |
|  | 2 | Set concept | Probability | **The learner;**  Identifies coins  Defines probability  Toss and find total possibilities (sample space)  State the formation for finding probability | | **The leaner;**  Reads, pronounces, spells and writes the new words  Coins  Probability  Sample space  Toss e.t.c. | **Probability**  This is the meansure of chance  Probability = n(Events) or  n(sample space)  Probability = n(E)  n(S)  **Examples**  Given that set P =(1, 2, 3, 4, 5) . find the probability of picking a number less than four  Sample space = (1, 2, 3, 4, 6)  = 5  Expected events =(1, 2, 3)  = 3  Probability = n(E)  n(S)  = 3  5 | | Guided discovery  Group work  Brain storming | States the formula  Finds probability | | Coins  Dice  Letter cards | Fountain book 6 page 19 – 23  MK book 6 page 26 – 27 | | |  |
|  | 3 | Whole numbers | Place values and values | **The learner;**  Identifies digits according to their place values  Tells place values of digits of members of whole numbers of decimals | | **The learner;**  Reads, writes, spells and pronounces the words  Place values  Values  Millions  Thousands  Hundreds  Tens  Ones | **Place values and values**  **A place value** Shows the position of the digit in a given number  **A value**  is a product of a digit and its place value  Value = Digit x place value  **Activity**  Find the place value of eah digit in 2 1 3 4 6 7 5 | | Problem solving  Explanation  Guided discussion | Study place values  Find values  State place values | | A chart showing place values and values | Fountain page 25 -28  MK book 6 page 34 – 35 | | |  |
|  | 4 | Whole numbers | Expanding numbers | **The learner;**  expands numbers using values  Expands numbers using place values  Expands numbers using powers | | **The learner;**  reads, writes, spells and pronounces words  Expands  values  numbers  powers  exponents | **Expanding numbers using place values**  Expand 2436 using place values  TH H T O = (2x1000)+(4x100)+discovery  3 4 3 6 (3x10) +(6x1)  Expanding numbers using values  TH H T O  4 6 7 8  Ones = 8 x 1 = 8  Tens = 7 x 10 = 70  Hundreds = 6x100 = 600  Thousands = 4 x 1000 = 4000  4 6 7 8 using values  4000 + 600 + 70 + 8 | | Group work  Guided discovery  Brain storming | Identifying place values  Expanding numbers | | Abacii  Oranges  Cups straws | MK book 6 page 36 – 37  Functional MTC book 6 page 20 – 21  Understanding MTC book 6 page 25 – 27 | | |  |
|  | 5 |  | Writing figures in words | **The learner;**  Identifies numbers  Identifies place values  Writes in words | | **The learner;**  Reads, spells and writes places values, words | **NOTE**  Show all the place values of each digit  Add millions, thousands units  Write 43 287 in words   |  |  | | --- | --- | | **Thousands** | **Units** | | 43 | 287 |   48,287 = Forty three thousand two hundred eighty seven | | Brain storming  Guided discovery  Group work | Writing in words  Reciting multiplication tables | | A chart showing place values of values | MK book 6 page 38 – 39  Fountain book 6 page 29 – 30 | | |  |
| 4 | 1 |  | Writing words in figures | **The learner’**  Identifies the place values of each digit  Writes wholes and decimals in words | | **The learner;**  Reads, spells, pronounces and writes words  Whole  Decimals  Number | Five tenths  0.5  Thirty six and four tenths  Thirty six = 36  Four tenths = +0.4  36.4  Writing decimals in words  **Write 4 . 8 in words**  4 Four  +0.8 eight tenths  4.8 Four and eight tenths | | Problem solving  Guided discussion | Writing in words  Writing words in figures | | A chart showing values and place values of numbers | MK book 6 page 44 – 46 | | |  |
|  | 2 | Whole numbers | Rounding off whole numbers and decimal numbers | **The learner;**  Identifies the place value required  Round off whole numbers  Round off decimal numbers | | **The learner;**  Reads, spells, pronounces and writes round, off, decimal, number | Round off 4783 to the nearest hundreds  TH H T O  4 7 8 3  + 1  4 8 0 0  Round off 39.95 to the nearest tenths  T O TH HTH  3 9 . 9 5  + 1  4 0 . 0  39.95 = 40.0 | | Problem solving  Guided discussion  Brain storming | Recitation of multiplication tables  Rounding off | | Chalk board illustration | Understanding Mathematics book 6 page 34 – 35  MK book 6 page 47 – 48 | | |  |
|  | 3 |  | Roman numerals | **The learner;**  Identifies the key  Roman numerals  Conerting Roman numerals to Hindu Arabic numbers  Writes Hindu Arabic numerals to Roman numerals | | **The learner;**  Reads, spells, pronounces and writs words:  Arabic  Number  Romans  Numerals | Change 25 to Roman Numerals  25 = 20 + 5  = xx + v  = xxv  Change XLIV to Hindu Arabic  XLWZ = XL + IV  = 40 + 4  = 44 | | Group work  Brain storming  Guided discovery | Recitation of Roman numerals | | Chalk board illustration | MK book 6 page 49 – 52 | | |  |
|  | 4 | Operation on numbers | Addition of Numbers | **The learner;**  Identifies digits  Arranges the digits according to their place values  Adds figures correctly  Regrouping | | **The learner;**  Reads, spells, writes and pronounces the word  Add  Total  Altogether | Addition of numbers  Addition mean total, altogether plus (+), gain and increase  2 1 2 3 4 6 7  + 2 1 4 4 2 1  2 3 3 7 8 8 8 | | Question and answer  Guided discussion  Group work | Recitation of multiplication tables | | Chalk board illustration | MK book 6 page 55 – 56 | | |  |
|  | 5 |  | Subtraction | **The learner;**  Subtracts whole numbers  Word problem solving  Subtractions | | **The learner;**  Reads, spells, writes, subtract, problem word | Subtract  1 2 0, 1 8 6  - 2 0, 1 2 3  1 0 0, 0 6 3  A diary processed 6,500.650 litres of milk and sold 5,650,445  6,500,650  - 5,650,945  849,705  849,705 litres | | Problem solving  Guided discussion  Explanation | Recitation of multiplication table | | Chalk  board illustration | MK book 6 page 57-58 | | |  |
| 5 | 1 |  | Multiplication | **The learner;**  Multiplies numbers  Arranges digits according to their place values  Get the sum | | **The learner;**  Reads, spells, pronounces and writes word  Multiply  Times,  Of | Multiply 143 x 18  143  x 18  1144  + 1430  2574  Multiply  1345  x12 | | Problem solving  Guided discussion  Explanation | Recitation of multiplication table | | Chalk  board illustration | MK book 6 page 59 - 60 | | |  |
|  | 2 |  | Addition and Multiplication of numbers | **The learner;**  Identifies operations  Multiplies using added addition  Addition of mixed operations | | **The learner;**  Reads, spells, pronounces and writes words  Multiply  Mixed  Operation | Simplify : 3 x 4 + 5  (3x4) + 5 = 12 + 7  3 x 4 = 4 added 3 times  = 4 + 4 + 4 + 5  = 12 + 5  = 17 | | Problem solving  Brain storming  Explanation | Recitation of multiplication table | | Multiplication table | MK book 6 page 62 - 63 | | |  |
|  | 3 |  | Division | **The learner;**  Identifies digits according to their place values  Divides a number | | **The learner;**  Reads , interprets, division, share | Divide 1976 ÷ 13  1 5 2  13 1 9 7 6  1 x 13 =13  6 7  5 x 13 = 65  26  2 x 13 = -2 – 6  00  = 152 | | Problem solving  Brain storming  Explanation | Recitation of multiplication table | | Multiplication tables | MK book 6 page 62-63 | | |  |
|  | 4 | Number patterns and sequence | Divisibility test for 2, 3, 4 and 5 | **The learner;**  Tells when a number is divisible by 2  Tests for 2  States multiples of 2 and 3 | | **The learner;**  Read, spells, pronounces and writes words  divide  divisible  divisibility  multiplies | Any number ending with an even digit or ends with  0, 2, 4, 6, 8 is divisible by 2  **Divisibility test for 3**  A number is exactly divisible by 3 if the sum of the digits is divisible by 3.  Test whether 144 is divisible by 3  144 = 1 + 4 + 4  = 9  9÷3 = 3  9 is divisible by 3  **Divisiblity test for 5**  A number is divisible by 5 if it ends with 0 or 5 | | Guided discovery  Guided discussion  Explanation | Recitation of multiplication table | | Chalk  board illustration | MK book 6 page 74 - 75 | | |  |
|  | 5 |  | Divisibility test for 6,7,8, 9 and 10 | **The learner;**  Identifies numbers  Tests for divisibility test for 6,7, 8,9 and 10 | | **The learner;**  Read, spells, pronounces and writes words  Numbers  Test  Divisible  Divisibility | **Test for 6**  A number is dividible by 6 if it is divisible by 2 and 3  **Test for 7**  When the lkast digit of a number is doubled and the result is subtracted from the number formed by the digits  **Test for 8**  A number is divisible by 8 if the number formed by the last three digits is divisible by 8  **Test for 9**  A number is divisible by 9 if the sum of its digits is divisible by 9  **Test for 10**  A number is divisible by 10 | | Group work  Brain storming | Recitation of multiplication table | | Chalk  board illustration | MK book 6 page 61-62 | | |  |
| 6 | 1 | Number pattern and sequence | Square numbers Triangular and Even numbers | **The learner;**  Defines numbers  States examples of various numbers | | **The learner;**  Read, spells, pronounces and writes words  Even  Odd  Triangular  Prime  Square  Composite | **Triangular number**  These are number got after adding consecutive counting numbers  **Square numbers**  A square number is a number got after multiplying counting number by itself.  **Whole numbers**  Whole numbers start with 0  **Even numbers**  These are natural numbers that are exactly divisible by 2.  (0,2,4,6,8,10,1)  **Odd numbers**  These are numbers which are not exactly divisible by 2 | | Group work  Guided discovery  Explanation | Recitation of multiplication table | | Chalk  board illustration | MK book 6 page 67- 72 | | |  |
|  | 2 |  | Finding consecutive counting numbers | **The learner;**  Gives the meaning of consecutive  Identifies counting numbers  Finds consecutive counting numbers | | **The learner;**  Read, spells, pronounces and writes words  Counting  Consecutive  Numbers  ……… | Consective means follow each other  **Examples**  The sum of three consecutive counting numbers is 36. Find the numbers.   |  |  |  | | --- | --- | --- | | n | (n+1) | (n+2) | | 11 | (1+1)  12 | 1+1+2)  13 |   Let the 1st number be –n  2nd number (n + 1)  3rd number be (n + 2)  n+ n + 1 + n + 2 = 36  n + n + n+ 1 + n + 2 = 36  3n + 3 = 36  3n + 3 – 3 = 36-3  3n + 0 = 33  1 11  3n = 32  3 3  n = 11   |  |  |  | | --- | --- | --- | | n | n+1 | n+2 | | 11 | 11+1  12 | 11+2  13 | | | Problem solving  Guided discussion  Explanation | Find consecutive counting numbers | | Counters | MK book 6 page 77 | | |  |
|  | 3 |  | Finding consecutive even numbers | **The learner;**  Gives the meaning of the word consecutive  Finds consecutive even numbers | | **The learner;**  Read, spells, pronounces and writes words  consecutive  even  numbers | The sum of three  Consecutive even  Numbers is 24  Find the numbers  Let the  1st number be  2nd  number be (k + 2)  3rd number be (k + 4)  k +(k+2) + (k+4) =24  k + k + 2 + k + 4 = 24  k+k+k+2+4=24  3k+6-6=24 – 6  3k to 6 = 18  6  3k = 18  3 3  k = 6   |  |  |  | | --- | --- | --- | | k | k+2 | k+4 | | 6 | 6 +2 8 | 6 + 4  10 |   Numbers are 6, 8 and 10 | | Guided discussion  Explanation | Practice more about consecutive even numbers | | Counters | MK book 6 page 78 | | |  |
|  | 4 | Number patterns and sequence | Finding consecutive odd numbers | **The learner;**  Identifies numbers  Finds the consecutive odd numbers | | **The learner;**  Read, spells, pronounces and writes words  consecutive  odd  number | The sum of three consecutive odd number is 39. Find the numbers  Let the 1st number be y  2nd number be (y + 2)  3rd number be (-1 + 4)  y + y + 2 + 1 x 4 = 39  y + y + y + 2 + y = 39  3y + 6 – 6 = 39  3y = 33  3 3  y = 11  11+2 11 + 4   |  |  |  | | --- | --- | --- | | y | (y+2) | (y+4) | | 11 | 13 | 15 |   The numbers are 11, 12 and 13. | | Problem solving  Guided discovery  Explanation | Recitation of multiplication table  Practice | | Chalk  board illustration | MK book 6 page 68 – 69 | | |  |
|  | 5 |  | Prime and composite numbers | **The learner;**  Defines prime numbers and composite numbers  List prime numbers  List composite numbers | | **The learner;**  Read, spells, pronounces and writes words  Prime  composite  itself  more  than | **Prime numbers**  These are counting numbers with only two factors i.e. 1 and itself (2,3,5,7,11…)  **Composite numbers**  These are counbting numbers with more than two factors  (4, 6, 8, 10, 12, 14, 15, …)  List Prime numbers between 1 and 10  (2, 3, 5, 7) | | Problem solving  Guided discussion  Explanation | Recitation of prime numbers between 0 and 100 | | A chart showing prime numbers | MK book 6 page 80-81 | | |  |
| 7 | 1 |  | Factors and multiples | **The learner;**  Describes a multiple of a number  Lists multiples of various numbers  Lists factors of numbers | | **The learner;**  Read, spells, pronounces and writes words  factor  multiple | **Factors of a number**  A factor of a number is that number divides a given number exactly.  One is a factor of every number and itself is the last factor. Find the factors of 44.  F**44** 1 x 44 = 44  2 x 22 = 44  4 x 11 = 44  F**44** = (1, 2, 4, 11, 22, 44) | | Problem solving  Guided discussion  Explanation | Recitation of multiplication table | | A chart showing factors | MK book 6 page 82 | | |  |
|  | 2 |  | Prime factorization | **The learner;**  Identifies prime factors  Finds values of powers  Express a number as a product of a month.  Finds more values of numbers from given powers | | **The learner;**  Read, spells, pronounces and writes words  prime  factorise  numbers | Prime factorisation means a way of finding the prime factors of a number prime factorise 54.  Multiplication form  2 54  2 27 2x3x3x3  3 9  3 3 Power form  1 21 x 32  Set notation  (2**1**, 3**1**, 3**2**, 3**3**) | | Group work  Guided discovery  Explanation | Recitation of multiplication table of prime numbers | | Strains  Bean seeds  Oranges  A chart showing prime factors | MK book 6 page 83-84 | | |  |
|  | 3 |  | Values of powers of numbers | **The learner;**  Identifies prime factors  Finds values of powers  Expresses a number as a product of another given number  Finds more values of numbers from given powers | | **The learner;**  Read, spells, pronounces and writes words  values  powers  product | **Values of powers**  Find the value of 24 2 32  24 = 2 x 2 x 2 x 2 2 16  = (2 x 2 ) x (2 x 2) 2 8  4 x 4 2 4  16 2 2  1  32 = 2 x 2 x 2 x 2 x 2 x 2**5**  Find the value of x**2** if x = 6  x**2** = x **x** x  =6 x 6  =36 | | Group work  Guided discovery  Explanation | Recitation of prime numbers | | A chart showing prime factors | MK book 6 page 83-86 | | |  |
|  | 4 |  | Abilities of numbers in power form | **The learner;**  Identifies powers  Finds products of powers  Adds numbers in power form | | **The learner;**  Read, spells, pronounces and writes words  product  powers | Find the value of 4**3** + 3**2**  4 x 4 x 4 + 3 x 3  16 x 4 + 9  64 + 9  =73  Find the value of 2**3** + 3**2** + 5**0**  2 x 2 x 2 + 3 x3 + 1  = 8 + 9 + 1  = 18 | | Brain storming  Explanation | Recitation of multiplication table | | A chart showing prime factors | MK book 6 page 86 | | |  |
|  | 5 | Number patterns and sequences | Representing prime factors on venn diagram | **The learner;**  Prime factors  Represent information on venn diagrams | | **The learner;**  Read, spells, pronounces and writes words  venn, diagram  represent  information | Use a venn diagram to show prime factors of 36 and 30  2 36 2 30 F**36**=(2**1**, 2**2**, 3**1**, 3**2**)  2 18 3 15  3 9 5 5 F**30**= (2**1**, 3**1**, 5**1**)  3 3 1  1  F**36** F**30**  2**2** 2**1** 5**1**  3**2**  3**1** | | Guided discovery  Explanation  Discussion | Identifying prime factors  Drawing venn diagrams | | A chart showing prime factors | MK book 6 page 89 | | |  |
| 8 | 1 |  | Finding the GCF and LCM on venn diagrams | **The learner;**  Put information on venn diagram  Calculates GCF  Find LCM | | **The learner;**  Read, spells, pronounces and writes words  greatest  common  multiple | Find the GCF and LCM of 8 and 12 using a venn diagram  2 8 2 12  2 4 2 6  2 2 3 3  1 1  F**8** F**12** = (2**1**, 2**2**)  GCF of F**6** and F**12** = 2 x 2 = 4  F**8** F**12** = (2**1**, 2**2** , 2**3**, 3**1**)  LCM of F**8** and F**2** = 2 x 2x2 x3  =4 x 6  =24 | | Problem solving  Group work  Explanation | Identifying prime factors  Drawing venn diagram | | A chart showing prime factors | MK book 6 page 89 | | |  |
|  | 2 |  | Finding the unknown values in a venn diagram | **The learner;**  Finds the value of un knowns  Find GCF  Find LCM | | **The learner;**  Read, spells, pronounces and writes words  values  GCF  LCM | F**x** F**y**  2**3** 2**1** 3**2**  2**2** 3**1** 3**3**  F**x** (2**1**, 2**2** , 2**3**, 3**1**)  = 2 x 2x2 x3  =4 x 6  =24  F**x** (2**1**, 2**2** , 3**1**, 3**2**, 3**3**)  = 2 x 2x3 x3x 3  =4 x 9 x 3  =4 x 27  =108  F**x** F-**1** = ( 2**1**, 2**2**, 3**1**)  GCF = 2 x 2 x 3  = 12 | | Brain storming    Guided discussion  Explanation | Identifying prime factors  Finding values of prime factors | | A chart showing prime factors | MK book 6 page 89 | | |  |
|  | 3 |  | Squares and square roots | **The learner;**  Defines squares and square roots  State square numbers  States square roots | | **The learner;**  Read, spells, pronounces and writes words  squares  roots | Find the square root of 64.  2 64  2 32  2 16  2 8  2 4  2 2  1  1 64 = (2 x 2) x (2 x 2) x (2 x 2)  = 2 x 2 x 2  **Using a factor tree**  64  2 32 64 = (2 x 2) x(2 x 2)  2 16 x (2 x 2)  2 8  =2x2x2  2 4  2 2 =8    2 1 | | Group work  Guided discovery  Explanation | Recitation of prime numbers | | A chart showing prime factors | MK book 6 page 97-98 | | |  |
|  | 4 |  | Squares of fractions and square roots of fractions | **The learner;**  Identify fraction  Find square of fractions  Finds square roots of fractions | | **The learner;**  Read, spells, pronounces and writes words  Squares  Roots | **Find the square of**  x =  **Find the square of**  x  =  **Find the square root of**  =  x  = | | Guided discovery  Guided discussion  Explanation | Recitation of multiplication table | | A chart showing squares and square roots | MK book 6 page 99-100 | | |  |
|  | 5 |  | Squares and square roots of decimals | **The learner;**  Identifies fractions  Finds squares of decimals  Finds square | | **The learner;**  Read, spells, pronounces and writes words  Fractions  decimals  root | **Square of decimals**  Find the square of 0.4  = 0.4 x 0.4  =  x  =  =0.16  Find the square root of 0.36  2 36 2 100  2 18 2 50  3 9 5 25  3 3 5 5  1 1  36 = (2 x 2) x ( 3 x 3)  = 2 x 3  = 6  100 (2 x 2) x ( 5 x 3)  2 x 5  = 10  =  =  = 0.6 | | Problem solving  Group work  Explanation | Practice on square roots | | A chart showing squares and square roots | MK book 6 page 102-103 | | |  |