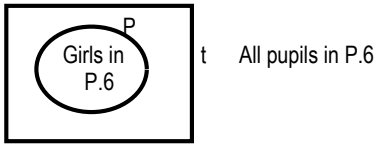
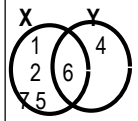
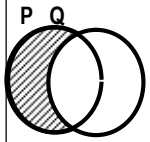
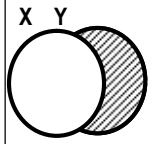
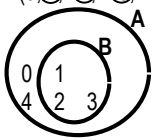
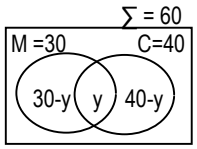
P.6 MATHEMATICS SCHEME TERM 1

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	
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=(∑)  	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 " $\cap$ " The symbol for union set is " $\cup$ " **Examples** List the members of i)M ii)N iii) M $\cap$ N iv) M $\cup$ N **M** **N** a b c d e f g h i i)M =(a,b,c,d,e) ii) N=(d,e,f,g,h,i) iii) M $\cap$ N = (d,e) iv) M $\cup$ N= (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 " $'$ " e.g. A^1 means complement of A. Describe the shaded region P Q Q^1 A B Shade $(A \cup B)^1$	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	**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.	Guided discussion Group work	Identifying given sets Describing shaded regions	A chart showing different sets	MK book 6 page 11 –13-15	

				regions		 i) X – Y = (1, 2, 7) ii) n (Y – X) Y – X = (4,5) n (Y – X) = 2 **Activity** Describe shaded regions  =_____  =_____	Explanation	Listing elements in required regions			
	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) 	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 $\{a\}$ | 1 | $\{\ \}, \{a\}$ | 2 $\{a,b\}$ | 2 | $\{\ \}, \{a\}, \{b\}, \{a,b\}$ | 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? $2^n = 8$ $2^n = 2^3$ $n = 3$ 2 | 8 2 | 4 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(A ⋂ B)=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?  n(M) only 30 - ¯1 <u>n(C) only</u> 40 - ¯1 <u>n(M n C)</u> Y 30 – y + y + 40 = y = 60 30 + 40 – y = 60 70 – y = 60 70 - 70 – y = 60 – 70 ¯y = ¯10 ¯1 ¯1 **Y** = <u>10</u> ∴ 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) / n(sample space) or 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 +0.8eight 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 THHTH 3 9.9 5 + 1 40 . 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, 186 - 20, 123 _____ 100, 063 _____ 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	

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<td>2</td>
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<td>Finding consecutive counting numbers</td>
<td>The learner;
Gives the meaning of consecutive

Identifies counting numbers

Finds consecutive counting numbers</td>
<td>The learner;
Read, spells, pronounces and writes words
Counting
Consecutive
Numbers
……</td>
<td>Consective means follow each other
Examples
The sum of three consecutive counting numbers is 36. Find the numbers.
<table><tr><td>n</td><td>(n+1)</td><td>(n+2)</td></tr><tr><td>11</td><td>(1+1)
12</td><td>1+1+2)
13</td></tr></table>
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
$\frac{3n}{3} = \frac{33}{3}$
n = 11
<table><tr><td>n</td><td>n+1</td><td>n+2</td></tr><tr><td>11</td><td>11+1
12</td><td>11+2
13</td></tr></table></td>
<td>Problem solving

Guided discussion

Explanation</td>
<td>Find consecutive counting numbers</td>
<td>Counters</td>
<td>MK book 6 page 77</td>
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<td>3</td>
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<td>Finding consecutive even numbers</td>
<td>The learner;
Gives the meaning of the word consecutive

Finds consecutive even numbers</td>
<td>The learner;
Read, spells, pronounces and writes words
consecutive
even
numbers</td>
<td>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
$\frac{3k}{3} = \frac{18}{3}$

k = 6

<table><tr><td>k</td><td>k+2</td><td>k+4</td></tr><tr><td>6</td><td>6 +2
8</td><td>6 + 4
10</td></tr></table>
Numbers are 6, 8 and 10</td>
<td>Guided discussion

Explanation</td>
<td>Practice more about consecutive even numbers</td>
<td>Counters</td>
<td>MK book 6 page 78</td>
<td></td>
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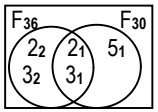
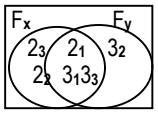
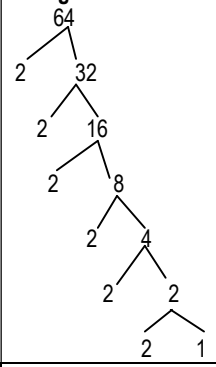
	4	Number patterns and sequence	Finding consecutive odd numbers	**The learner;** Identifies numbers Finds the consecutive odd numbers	**The learner;** Read, spells, pronounces and writes words consecutive odd number	The sum of three consecutive odd number is 39. Find the numbers Let the 1st number be 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 $\frac{3y}{3} = \frac{33}{3}$ 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 $2^1 \times 3^2$ 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 24 = 2 x 2 x 2 x 2 = (2 x 2) x (2 x 2) 4 x 4 16 3^2 = 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 $F_{36}=(2_1, 2_2, 3_1, 3_2)$ $F_{30}= (2_1, 3_1, 5_1)$ 	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 $F_8 \cap F_{12} = (2_1, 2_2)$ GCF of F_6 and F_{12} = 2 x 2 = 4 $F_8 \cup F_{12} = (2_1, 2_2, 2_3, 3_1)$ 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 (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 $F_x \cap F_{-1}$ = (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 $\sqrt{64} = \sqrt{(2 \times 2) \times (2 \times 2) \times (2 \times 2)}$ = 2 x 2 x 2 **Using a factor tree**  $\sqrt{64} = \sqrt{(2 \times 2) \times (2 \times 2)}$ $\sqrt{\times (2 \times 2)}$ =2x2x2 =8	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** $\frac{1}{2}$ $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$	Guided discovery Guided discussion	Recitation of multiplication table	A chart showing squares and square roots	MK book 6 page 99-100	

						Find the square of $\frac{5}{6}$ $\frac{5}{6} \times \frac{5}{6} = \frac{25}{36}$ **Find the square root of** $\frac{1}{9}$ $\sqrt{\frac{1}{9}} = \sqrt{\frac{1}{3} \times \frac{1}{3}}$ $= \frac{1}{3}$	Explanation				
	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 $= \frac{4}{10} \times \frac{4}{10}$ $= \frac{16}{100}$ =0.16 Find the square root of 0.36 2 | 36 — 2 | 18 — 3 | 9 — 3 | 3 — 1 2 | 100 — 2 | 50 — 5 | 25 — 5 | 5 — 1 $\sqrt{36} = \sqrt{(2 \times 2) \times (3 \times 3)}$ = 2 x 3 = 6 $\sqrt{100\ (2 \times 2) \times (5 \times 3)}$ 2 x 5 = 10 $\sqrt{\frac{36}{100}} = \sqrt{\frac{6x6}{10x10}} = \frac{6}{10} = 0.6$	Problem solving Group work Explanation	Practice on square roots	A chart showing squares and square roots	MK book 6 page 102-103	