

Lesson notes for primary three 2020

Term I mathematics topical breakdown for P.3

Topical breakdown

1. Sets

- i) Naming and drawing sets
- ii) Grouping members in a set
- iii) Comparing sets
- iv) Types of sets; equal sets, union set, intersection set, empty set, equivalent , subsets etc
- v) Listing members of a set
- vi) Answering questions about the venn diagram


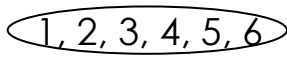
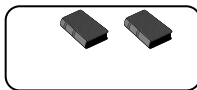
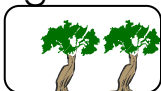
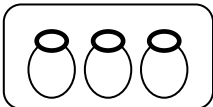
2. Numeration system and place values

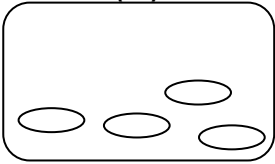
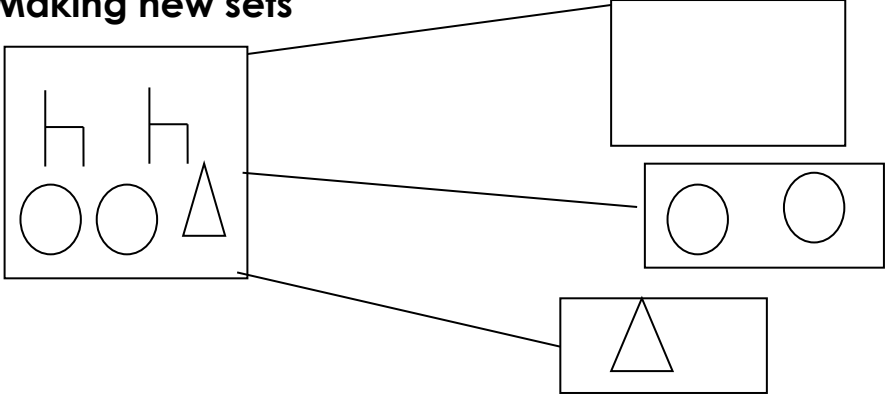
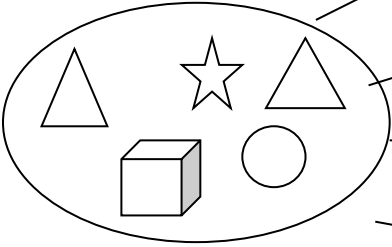
- i) Finding missing numbers
- ii) Writing numbers shown on the abacus
- iii) Drawing and showing numbers on abacus
- iv) Writing place values and values of numbers
- v) Writing numbers in words
- vi) Writing numbers in figures
- vii) Expanding numbers
- viii) Writing expanded numbers

3. Operation on whole numbers

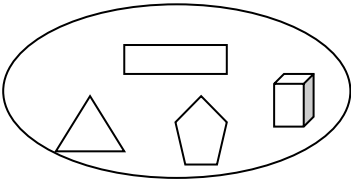
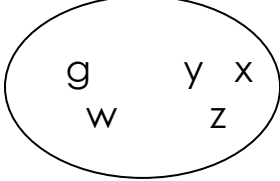
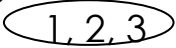
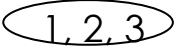
- i) Addition
 - Addition of 2 digit number with and without carrying
 - Addition of 3 digit number with and without carrying
 - Addition of 4 digit number with and without carrying
- ii) Subtraction
 - Subtraction of 2 digit number with and without carrying
 - Subtraction of 3 digit number with and without carrying
 - Subtraction of 4 digit number with and without carrying
- iii) Multiplication – multiplying by 2,3,4,5,6,7,8,9,10,11,12
- iv) Division – dividing by 2, and 3 (simple numbers)

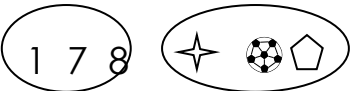
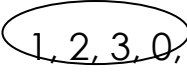
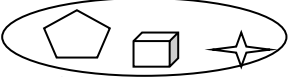
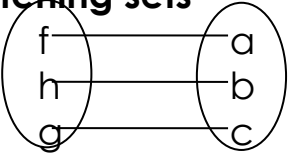
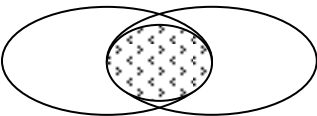
SIR APOLLO KAGGWA SCHOOLS
P.3 MATHEMATICS LESSON NOTES TERM 1 2015

Theme Sub-theme Content	<p>Our Division</p> <p>Name and location of our Division</p> <p>Counting and finding missing numbers</p> <p>Numbers between 0 - 99 e.g.</p> <p>a) 0, 1, 2, 3, 4, 5, 6, <u>7</u>, 8, <u>9</u>, 10</p> <p>b) 11, 12, <u>13</u>, 14, 15, <u>16</u>, 17, 18, 19, <u>20</u></p> <p>c) 52, 53, <u>54</u>, 55, 56, <u>57</u>, 58</p> <p>d) 30, <u>40</u>, 50, 60, 70, <u>80</u>, 90, 100</p>
Evaluation activity	<p>Pupils will do a filling in exercise</p> <p>1. 5, 10, 15, ____, 25, 30, 35, ____, 45, 50, ____, 60</p> <p>2. 10, 9, 8, 7, 6, ____, 3, 2, ____, 0</p> <p>3. 45, 46, 47, 48, ____, 50, 51, ____, 53</p> <p>4. 100, 90, ____, 70 60, 50, ____, 30, 10</p> <p>(a) 52, 54, 56, ____, 60, 62, ____, 66</p>
Theme Sub-theme Content	<p>Our Division</p> <p>Name and location of our Division</p> <p>Sets</p> <p>Definition a set is a collection of well defined objects.</p> <p>Naming sets e.g.</p> <p>e.g A set of vowel letters {a, e i, o, u}</p> <p>A set of balls </p> <p>Forming sets e.g. Draw a set of numbers </p> <p>b) Draw a set of books </p> <p>Counting members in a set</p> <p>e.g. a)  A set of two trees</p> <p>b)  A set of 3 pots.</p>
Evaluation	<p>1. Draw these sets</p>

activity	<p>a) A set of 2 bottles b) A set of 5 huts c) A set of 6 chairs 2. Name the sets below</p> <p>(a) b) (c)</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;">b, c, f,</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;">Tina Elizabeth Mary</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;">  </div> </div>
<p>Theme Sub-theme Content</p> <p>Evaluation activity</p>	<p>Our Division Name and location of our Division Making new sets</p> <div style="text-align: center;">  </div> <p>Subset – A subset is a small set got from a big set. Symbol for subset \subset and not subset $\not\subset$ What is a subset?</p> <p>1. Make and name new sets.</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; padding: 10px; margin-right: 20px;">  </div> <div style="display: flex; flex-direction: column; gap: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 150px; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; border-radius: 50%; width: 150px; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; border-radius: 50%; width: 150px; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; border-radius: 50%; width: 150px; height: 40px;"></div> </div> </div>
Theme	Our Division

<p>Sub-theme Content</p> <p>Evaluation activity</p>	<p>Name and location of our Division</p> <p>Empty sets / null set</p> <p>Definition An empty set is a set with no members. The symbol for empty set is $\{ \}$ or \emptyset</p> <p>Using empty or not empty</p> <p>a) A set of men who breastfeed babies. Empty set</p> <p>b) A set of birds with two eyes. Not empty set</p> <p>c) A set of animals eaten as food. Not empty set</p> <p>1. What is an empty set?</p> <p>2. Use empty or not empty</p> <p>a) A set of flies which are as big as flies.</p> <p>b) A set of people who are women.</p> <p>c) A set of homes with 10 people.</p> <p>d) A set of cows with 3 eyes.</p> <p>e) A set of 7 books.</p> <p>3. Name the symbol given. $\{ \}$</p>
<p>Theme Sub-theme Content</p> <p>Evaluation activity</p>	<p>Our Division</p> <p>Name and location of our Division</p> <p>Grouping members in a set</p> <p>a) Grouping in twos</p> <p>b) Grouping in threes</p> <p>c) Grouping in fives</p> <p>Example</p> <div data-bbox="418 1318 863 1478" data-label="Image"> </div> <p>There are 6 groups of two eggs.</p> <p>Group and fill the gaps.</p> <p>Exercise 1g of MK old edition pg8</p>
<p>Theme</p>	<p>Our Division</p>

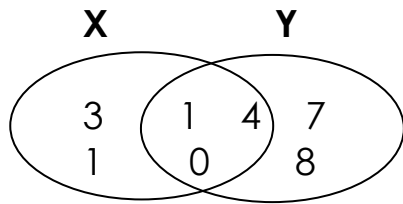
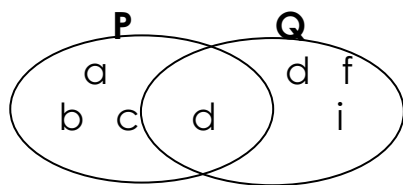
<p>Sub-theme Content</p>	<p>Name and location of our Division Comparing sets using more or less Examples</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>M</p>  </div> <div style="text-align: center;"> <p>N</p>  </div> </div> <p>Set M has 4 members Set N has 5 members Set N has more members than set M. Exercise 1d of MK old edition pg4</p>
<p>Theme Sub-theme Content</p>	<p>Our Division Name and location of our Division Types of sets a) Equal sets : these are sets with same members and same number of objects. e.g. A B</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p>Set A has 3 members Set B has 3 members Since the members are the same, therefore they are equal sets. Symbols are; = equal to \neq not equal to</p> <p>Exercise 1n Mk old edition pg18.</p>
<p>Theme Sub-theme Content</p>	<p>Our Division Name and location of our Division Types of sets b) Equivalent sets and non equivalent sets These are sets with the same number of elements; however the members may not be the same. e.g. X Y</p>

Evaluation activity	 <p>Set X and set Y are equivalent sets. Define equivalent sets Exercise 1n Mk old edition pg 18.</p>
Theme Sub-theme Content	<p>Our Division Name and location of our Division Listing members in a set</p> <p>e.g.  $= \{0, 1, 2, 3, 5\}$</p> <p> $= \{ \text{pentagon}, \text{cube}, \text{star} \}$</p> <p>Matching sets</p> 
Evaluation activity	Exercise 1m of MK old edition pg 16.
Theme Sub-theme Content	<p>Our Division Name and location of our Division Finding common numbers (intersection)</p> <p>Intersection symbol; \cap e.g. $A = \{1, 2, 3, 4\}$ $B = \{0, 1, 2, 5\}$ $A \cap B = \{1, 2\}$</p> <p>$R = \{ \text{circle}, \text{square}, \text{triangle} \}$ $S = \{ \text{cube}, \text{star}, \text{triangle} \}$ $R \cap S = \{ \text{triangle} \}$</p>
Evaluation activity	<p>Exercise from a textbook Identifying the intersection part on a venn diagram Eg.</p> 
Theme	Our Division

Sub-theme Content	Name and location of our Division The union set Finding members in the union set using curly brackets. e.g. $A = \{a, b, c, d, f, e\}$ $B = \{d, e, f, a\}$ $P = \{1, 2, 3, 4\}$ $Q = \{3, 5, 7, 9\}$ $A \cup B = \{a, f, e, b, c, d\}$ $P \cup Q = \{1, 2, 3, 4, 5, 7, 9\}$
Evaluation activity	An exercise from a text book Union symbol = \cup Identifying the union part on a venn diagram Eg. <div style="display: flex; justify-content: space-around; width: 100px;"> A B </div>
Theme Sub-theme Content	Our Division Name and location of our Division Finding number of members in a given set using symbol (n) e.g. $P = \{1, 4, 7\}$ Find $n(P)$ $P = \{1, 4, 7\}$ $n(P) = 3$ members $M = \{a, e, i, o, u\}$ Find $n(M)$ $M = \{a, e, i, o, u\}$ $n(M) = 5$ members
Evaluation activity	An exercise from a textbook
Theme	Our Division

b) Representing information on a venn diagram

Examples given;

 $X = \{0, 1, 2, 3, 4\}$ $Y = \{1, 4, 7, 8, 0\}$

 $P = \{a, b, c, d\}$
 $Q = \{d, e, f, g, i\}$

c) Answering questions about a venn diagram

A

B

 1 3
4

 5 6
7

 find; (i) $A \cup B$

 (ii) $A \cap B$

(iii) A only etc

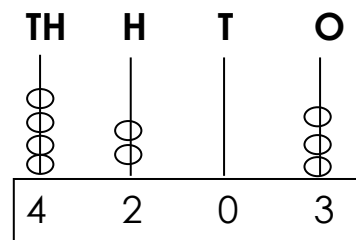
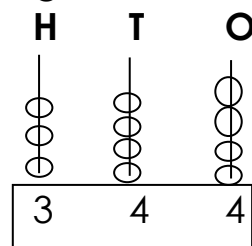
Evaluation activity

An exercise from the textbook

 Theme
Sub-theme
Content

Our Division
Physical features in our division
Numeration system and place values (abacus)

Writing numbers on the abacus


Evaluation activity

An exercise from the MK 2000 bk3 pg21

Theme

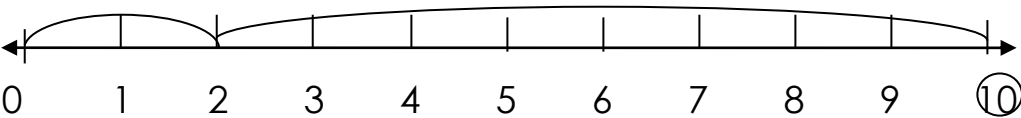
Our Division

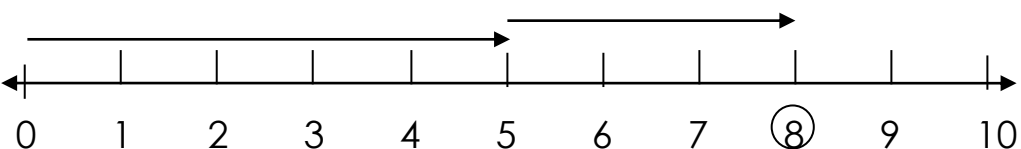
Sub-theme Content	Physical features in our division Place values Filling in missing numbers in their place values e.g. 1. 603 = <u>6</u> hundreds <u>0</u> tens <u>3</u> ones 2. 14 = 1 tens 4 ones 3. 348 = 3 hundreds 4 tens 8 ones Write these numbers 1. 3 hundreds 4 tens 5 ones = 345 2. 2 tens 6 ones = 26
Evaluation activity	An exercise from the MK 2000 Bk3 pg 222 and 223
Theme Sub-theme Content	Our Division Physical features in our division Finding place values e.g. TH T H O 1 2 3 4 4 is ones, 3 is tens, 2 is hundreds, 1 is thousands Find the place value of 8 in the number: 4789 Solution: 47 <u>8</u> 9 — tens The place value of 8 is tens
Evaluation activity	An exercise from primary MTC Bk3 page 35
Theme Sub-theme Content	Our division Physical features in our division Finding values of given numbers e.g find the value of 6 in the number 469 H T O 469 = 4 <u>6</u> 9 ↓ (6x10) = 60 The value of 6 is 60
Theme	Livelihood in our division

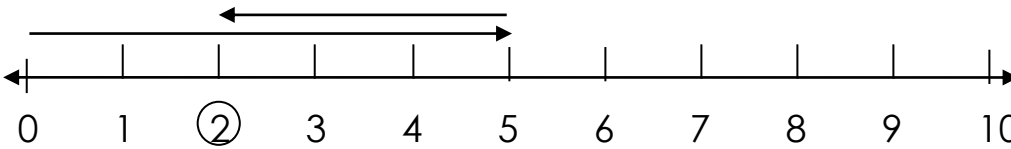
Sub-theme Content	<p>Social services and their importance</p> <p>Finding sum of values</p> <p>e.g find the sum of the values of 7 and 8 in the number shown above</p> <p style="text-align: center;">ThHTO</p> <p>4789 = 4789</p> <p style="margin-left: 150px;">(8x10)=80</p> <p style="margin-left: 100px;">(7x100)=700</p> <p>700</p> <p>+80</p> <p><u>780</u></p>
Theme Sub-theme Content	<p>Livelihood in our division</p> <p>Social services and their importance</p> <p>Expanding numbers using place values</p> <p>Eg. Expand 234</p> <p>HTO</p> <p>234 = (2x100)+(3x10)+(4x1)</p>
Theme Sub-theme Content	<p>Livelihood in our division</p> <p>Social service and their importance</p> <p>Eg. Expand 234 using values</p> <p>234= 200+30+5</p>
Theme Sub-theme Content	<p>Livelihood in our division</p> <p>Social services and their importance</p> <p>Writing expanded numbers in short form</p> <p>Eg. What number has been expanded?</p> <p>700+20+3 = 700</p> <p style="text-align: center;">20</p> <p style="text-align: center;">+ 3</p> <p style="text-align: center;"><u>723</u></p>
Theme Sub-theme Content	<p>Livelihood in our division</p> <p>Social services and their importance</p> <p>Writing figures in words</p> <p>e.g. Write 48 in words</p> <p>solution: 48 = 40 forty</p> <p style="text-align: center;">+ 8 eight</p> <p style="text-align: center;"><u>48 forty eight</u></p>
Evaluation activity	An exercise from MK 2000 Bk3 pg23
Theme	Livelihood in our division

Sub-theme Content	Social services and their importance Writing numbers in figures e.g. Write 'Two hundred twelve' in figures Two hundred = 200 Twelve = <u>+12</u> Two hundred twelve <u>212</u>
Evaluation activity	An exercise 2g Mk Bk3 pg24
Theme Sub theme Content	Livelihood in our division Social services and their importance Roman Numerals (I, II, III, IV, V, VI, VII, VIII, IX, X, L, -----) Converting Hindu Arabic numerals to Roman numerals Converting Hindu Arabic numerals to Roman numerals e.g. Convert 42 into Roman numerals 42 = 40 + 2 = XL + II = XLII Convert 15 into Roman numerals 15 = 10 + 5 = X + V = XV
Evaluation activity	An exercise from MK old edition pg 44
Theme Sub-theme Content	Livelihood in our division Social services and their importance Roman numerals Converting Roman numerals to Hindu Arabic numerals e.g. Change VIII to Hindu Arabic numerals VIII = 8 Change XXIV to Hindu Arabic numerals XXIV = XX + IV = 20 + 4 = 24
Evaluation	An exercise from MK old edition pg44

activity	
Theme Sub-theme Content	Livelihood in our division Challenges in social services and their solutions Definition Even numbers are numbers which are exactly divisible by 2. Types of numbers Even numbers e.g. 0, 2, 4, 6, 8, 10, 12, 14,
Evaluation activity	An exercise from MK 2000 Bk3 pg20
Theme Sub-theme Content	Livelihood in our division Challenges in social services and their solutions Definition of odd numbers: are numbers which are not exactly divisible by 2. Types of numbers Odd numbers e.g. 1, 3, 5, 7, 9, 11, 13, 15,
Evaluation activity	An exercise from MK 2000 Bk3 pg20
Theme Sub-theme Content	Livelihood in our division Challenges in social services and their solutions Operation on whole numbers Addition of tens and ones vertically without carrying $\begin{array}{r} 1 \quad 1 \\ +1 \quad 2 \\ \hline 2 \quad 3 \end{array}$ add ones = $1 + 2 = 3$ add tens = $1 + 1 = 2$ Word problems Ashabe had 32 mangoes, she picked 17 more mangoes. How many mangoes did she have altogether? Solution $\begin{array}{r} 32 \text{ mangoes} \\ + 17 \text{ mangoes} \\ \hline 49 \end{array}$
Evaluation activity	An exercise from MK 2000 bk3 pg 40 and 41
Theme	Livelihood in our division

<p>Sub-theme Content</p>	<p>Soil Addition with carrying (vertically) e.g. $\begin{array}{r} 8 \quad 6 \\ + 2 \quad 4 \\ \hline 1 \quad 1 \quad 0 \end{array}$ $6 + 4 = 10$</p> <p>Word problems Tushabe had 27 litres of milk. His mother gave him more 14 litres of milk. How many litres of milk did he have altogether? Solution $\begin{array}{r} 2 \quad 7 \text{ litres} \\ + 1 \quad 4 \text{ litres} \\ \hline 4 \quad 1 \text{ litres} \end{array}$ $7 + 4 = 11$</p> <p>Evaluation activity Exercise 3c from MK 2000 Bk3 pg 42</p>
<p>Theme Sub-theme Content</p>	<p>Livelihood in our division Soil Addition up to 4 place vales with and without carrying e.g. Add $\begin{array}{r} \text{TH} \quad \text{HT} \quad \text{O} \\ 1 \quad 41 \quad 3 \\ + \quad 23 \quad 0 \\ \hline 1 \quad 64 \quad 3 \end{array}$</p> <p>Word problems A train carried 20 children, 23 men and 125 women. How many people did it carry altogether? Solution $\begin{array}{r} \text{Children} \quad 2 \quad 0 \\ \text{Men} \quad 2 \quad 3 \\ \text{Women} \quad + 2 \quad 5 \\ \hline \text{Altogether} \quad 1 \quad 68 \text{ people} \end{array}$</p> <p>Evaluation activity Exercise 3d from MK 2000 Bk3 pg43</p>
<p>Theme Sub-theme Content</p>	<p>Livelihood in our division Soil Addition using a number line e.g. Add: $2 + 8 =$</p>  <p>$2 + 8 = 10$</p>

	<p>Add: $5 + 3 =$</p>  <p>$5 + 3 = 8$</p>
Evaluation activity	Exercise 4k from Mk old edition Pg 55
Theme Sub-theme Content	<p>Livelihood in our division</p> <p>Soil</p> <p>Word problems</p> <p>e.g. Sungura had 65 cows. He sold off 35. How many cows remained?</p> <p>soln $\begin{array}{r} 65 \\ - 35 \\ \hline 30 \end{array}$ $5 - 5 = 0$ $6 - 3 = 3$</p> <p>$\underline{\quad 30 \text{ cows}}$</p>
Evaluation activity	Exercise 4b from Mk 2000 bk3 pg49
Theme Sub-theme Content	<p>Livelihood in our division</p> <p>Soil</p> <p>More subtraction</p> <p>e.g. $\begin{array}{r} 127 \\ - 32 \\ \hline 95 \end{array}$ $7 - 2 = 5$ $12 - 3 = 9$</p>
Evaluation activity	Exercise 4c from Mk 2000 Bk3 Pg50
Theme Sub-theme Content	<p>Livelihood in our division</p> <p>Soil</p> <p>More subtraction</p> <p>e.g. Take away 53 from 91</p> <p>$\begin{array}{r} 91 \\ - 53 \\ \hline 38 \end{array}$</p>
Evaluation	Exercise 4d from Mk 2000 Bk3 Pg51

activity													
Theme Sub-theme Content	Livelihood in our division Soil Subtraction of 4 digit numbers e.g. $\begin{array}{r} 3 \quad 6 \quad 4 \quad 2 \\ - \quad 3 \quad 2 \quad 1 \\ \hline 3 \quad 3 \quad 2 \quad 1 \end{array}$ Word problems e.g. on Pg 54 of MK 2000												
Evaluation activity	Evaluation activity Exercise 4e from Mk 2000 bk3 Pg 52												
Theme Sub-theme Content	Livelihood in our division Soil Subtracting using a number line e.g. $5 - 3 =$  $5 - 3 = 2$												
Evaluation activity	An exercise from Trs resource book												
Theme Sub-theme Content	Livelihood in our division Soil Multiplication table (x2) (a) Complete the table <table border="1" data-bbox="396 1488 1375 1583"><tr><td>No of pairs</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>No. of legs</td><td><u>2</u></td><td>4</td><td><u>6</u></td><td><u>8</u></td><td>10</td></tr></table> $\begin{array}{r} 3 \quad 4 \quad 3 \\ \times \quad 2 \\ \hline 6 \quad 8 \quad 6 \end{array}$	No of pairs	1	2	3	4	5	No. of legs	<u>2</u>	4	<u>6</u>	<u>8</u>	10
No of pairs	1	2	3	4	5								
No. of legs	<u>2</u>	4	<u>6</u>	<u>8</u>	10								
Evaluation activity	Exercise 5a from Mk 2000 Bbk3 Pg 55												
Theme	Livelihood in our division												

Sub-theme Content	Soil Multiplication x2 Word problems e.g. How many eyes do 5 boys have? Solution 5 x 2 = 10eyes												
Evaluation activity	Exercise 6e from Mk Old edition pg65												
Theme Sub-theme Content	Livelihood in our division Soil Multiplication table (x3) Complete the table <table><tr><td>No of stools</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>No. of legs</td><td><u>3</u></td><td>6</td><td><u>9</u></td><td><u>12</u></td><td>15</td></tr></table> <div><div><div>1 4</div><div>X 3</div><div><u>4 2</u></div></div><div><div>4 x 3 = 12</div><div>3 x 1 = 3</div><div>3 + 1 = 4</div></div></div>	No of stools	1	2	3	4	5	No. of legs	<u>3</u>	6	<u>9</u>	<u>12</u>	15
No of stools	1	2	3	4	5								
No. of legs	<u>3</u>	6	<u>9</u>	<u>12</u>	15								
Evaluation activity	Exercise 5d from Mk 2000 Bk3 Pg58												
Theme Sub-theme Content	Livelihood in our division Soil Multiplication x3 Word problems e.g. One book has 12 pages. How many pages do 3 similar books have? Solution <div><div><div>1 2</div><div>X 3</div><div><u>3 6</u></div></div><div><div>2 x 3 = 6</div><div>1 x 3 = 3</div></div></div> <div>3 6 pages</div>												
Evaluation activity	Exercise 5e from Mk 2000 Bk3 pg 58												
Theme Sub-theme Content	Livelihood in our division Soil Multiplication table (x4) Complete the table <table><tr><td>No of cows</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>No. of legs</td><td>4</td><td>8</td><td>12</td><td>16</td><td>20</td></tr></table> <div><div><div>1 5</div></div><div><div>5 x 4 = 20</div></div></div>	No of cows	1	2	3	4	5	No. of legs	4	8	12	16	20
No of cows	1	2	3	4	5								
No. of legs	4	8	12	16	20								

	<div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div></div></div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div></div></div> 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Sub-theme Content	Soil Multiplication x7 e.g. Multiply <div><div><div><div>2</div><div>3</div></div><div><div>x</div><div>7</div></div><div><div>1</div><div>6</div><div>1</div></div></div><div><div>$3 \times 7 = 21$</div><div>$2 \times 7 = 14$</div><div>$(14 + 2) = 16$</div></div></div>														
Evaluation activity	Exercise 5n from Mk 2000 Bk3 Pg66														
Theme Sub-theme Content	Livelihood in our division Natural causes of challenges in our environment (a) Complete the table <table><tr><td>No of weeks</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>No. of days</td><td>7</td><td>14</td><td>21</td><td>28</td><td>35</td><td>42</td></tr></table> (b) Word problems e.g How many days are there in 3 weeks? Solution : $3 \times 7 = 21$ days	No of weeks	1	2	3	4	5	6	No. of days	7	14	21	28	35	42
No of weeks	1	2	3	4	5	6									
No. of days	7	14	21	28	35	42									
Evaluation activity	An exercise from Trs resource book														
Theme Sub-theme Content	Livelihood in our division Natural causes of challenges in our environment Multiplication x8 e.g. Multiply <div><div><div><div>3</div><div>2</div></div><div><div>x</div><div>8</div></div><div><div>2</div><div>5</div><div>6</div></div></div><div><div>$2 \times 8 = 16$</div><div>$3 \times 8 = 24$</div><div>$(24 + 1) = 25$</div></div></div>														
Evaluation activity	Exercise 5p from Mk 2000 Bk3 Pg 67														
Theme Sub-theme Content	Livelihood in our division Natural causes of challenges in our environment Complete the table <table><tr><td>No of spiders</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>No. of legs</td><td>8</td><td>16</td><td>24</td><td>32</td><td>40</td><td>48</td></tr></table> How many legs do 2 spiders have? $2 \times 8 = 16$ legs	No of spiders	1	2	3	4	5	6	No. of legs	8	16	24	32	40	48
No of spiders	1	2	3	4	5	6									
No. of legs	8	16	24	32	40	48									
Evaluation															

activity	An exercise from Trs resource book																												
	<p>Livelihood in our division Natural causes of challenges in our environment Word problems An exercise book has 36 pages. How many pages do 9 exercise books have? e.g. Multiply</p> <div><div><div>36</div><div><div>x9</div><div>324</div></div></div><div><div>6x9 = 54</div><div>3x 9 = 27</div><div>(27 + 5) = 32</div></div></div> <p>An exercise from teacher's resource book.</p>																												
Theme Sub-theme Content	<p>Livelihood in our division Natural causes of challenges in our environment Multiplication table 10 e.g. Multiply 32 x 10 12x10=120 32x10=320 48x10=480 53x10=530 Complete the table</p> <table><tr><td>x</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr><tr><td>10</td><td>0</td><td>10</td><td>20</td><td>30</td><td>40</td><td>50</td><td>60</td><td>70</td><td>80</td><td>90</td><td>100</td><td>110</td><td>120</td></tr></table>	x	0	1	2	3	4	5	6	7	8	9	10	11	12	10	0	10	20	30	40	50	60	70	80	90	100	110	120
x	0	1	2	3	4	5	6	7	8	9	10	11	12																
10	0	10	20	30	40	50	60	70	80	90	100	110	120																
Evaluation activity	Exercise 5t from Mk 2000 Bk3 Pg 69																												
Theme Sub-theme Content	<p>Livelihood in our division Natural causes of challenges in our environment Word problems Complete the table</p> <table><tr><td>No of girls</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>No. of fingers</td><td>10</td><td>20</td><td>30</td><td>40</td><td>50</td><td>60</td></tr></table> <p>How many toes do 5 boys have?</p> <div><div><div>10</div><div><div>x5</div><div>50</div></div></div><div>toes</div></div> <p>Multiplication table 11</p>	No of girls	1	2	3	4	5	6	No. of fingers	10	20	30	40	50	60														
No of girls	1	2	3	4	5	6																							
No. of fingers	10	20	30	40	50	60																							

Evaluation activity	E.g multiply 2 x 11 11 <u>X2</u> <u>22</u> Exercise from Mk Bk3 Pg 97												
Theme Sub-theme Content	Livelihood in our division Natural causes of challenges in our environment Multiplication by 12 Complete the table <table><tr><td>No of years</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>No. of months</td><td>12</td><td>24</td><td>26</td><td>48</td><td>60</td></tr></table> How many books are there in 3 dozens of books? 1 2 x 3 <u>3 6</u> books An exercise from Trs collection	No of years	1	2	3	4	5	No. of months	12	24	26	48	60
No of years	1	2	3	4	5								
No. of months	12	24	26	48	60								
Evaluation activity													
Theme Sub-theme Content	Livelihood in our division Changes in the environment through human activities Division of simple numbers e.g. i) 36 ÷ 4 = 9 ii) 25 ÷ 5 = 5 iii) 15 ÷ 3 = 5 etc												

Term II 2015

Topical breakdown

1. Number patterns and sequence

- i) Finding missing numbers
- ii) Counting in twos, threes, fours, fives and tens
- iii) Completing tables – addition, subtraction, multiplication, division
- iv) Addition of magic square

2. Fractions

- i) Naming fractions
- ii) Drawing fractions
- iii) Comparing fractions
- iv) Addition of fractions
- v) Subtraction of fractions
- vi) Finding shaded and unshaded

3. Graphs

- i) Pictographs
- ii) Bar graph
- iii) Drawing graphs

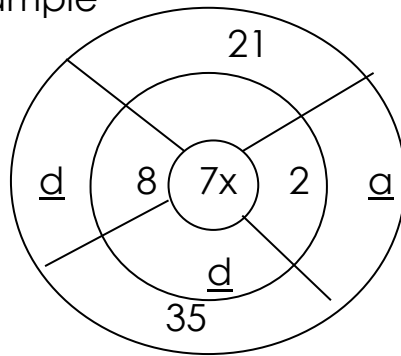
P.3 MATHEMATICS LESSON NOTES TERM 2 2015

	<p>Lesson 1</p> <p>Number facts and sequences</p> <p>Filling in the missing numbers</p> <p>Content: Counting in twos, threes, fours, fives and tens (ascending)</p> <p>Examples</p> <p>a) 0, 2, 4, 6, __, 10, __, 14</p> <p>b) 0, 3, 6, 9, __, __, 18</p> <p>c) 4, 8, __, 16, __, 24, __, 32</p> <p>d) 0, __, 10, 15, __, 25, __</p> <p>e) 10, 20, 30, __, 50, __</p> <p>An activity in MK bk3 pg84</p>
<p>Topic Subtopic content</p> <p>Evaluation activity</p>	<p>Lesson 2</p> <p>Number patterns and sequence</p> <p>Filling in the missing numbers</p> <p>Counting in twos, threes, fours, fives and tens in a ascending and descending order</p> <p>Examples:</p> <p>16, __, 12, __, 8, 6, __, 2, 0</p> <p>a) 9, __, 3, 0</p> <p>b) 60, __, 40, __, 20, 100</p> <p>An activity MK bk3 pg85</p>
<p>Topic Subtopic content</p> <p>+</p>	<p>Lesson 3:</p> <p>Number facts and sequences</p> <p>Completing tables</p> <p>Filling in the missing numbers (tables of addition)</p> <p>e.g.</p> <div data-bbox="516 1472 907 1766"> </div> <div data-bbox="870 1440 1490 1894"> </div>

Evaluation activity	$a = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$ $c = \underline{\hspace{1cm}}$ $d = \underline{\hspace{1cm}}$ MK bk3 pg81
Topic Subtopic content	<p>Lesson 4 Number facts and sequences Completing tables Tables of subtraction example</p> <div data-bbox="516 562 909 873" data-label="Diagram"> </div> <div data-bbox="480 919 1172 1331" data-label="Diagram"> </div> <div data-bbox="1101 953 1250 1163" data-label="Text"> $a = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$ $c = \underline{\hspace{1cm}}$ </div>
Evaluation activity	Written exercise
Topic Subtopic content	<p>Lesson 5 Number facts and sequences Completing tables Tables involving multiplication and division</p>

Evaluation activity

Example



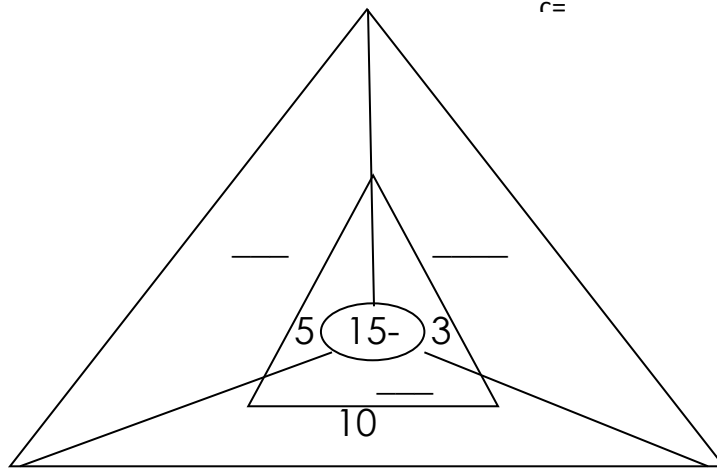
$$9 = 7 \times 2 = 14$$

$$b = 21 \div 7 \\ = 3$$

$$a = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

$$c = \underline{\hspace{2cm}}$$



Written exercise

Topic
Subtopic
content

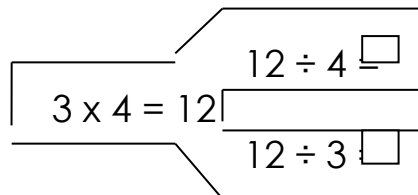
Lesson 6

Number facts and sequences

Filling in the missing numbers


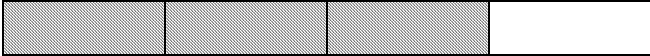

Relationship between multiplication and division


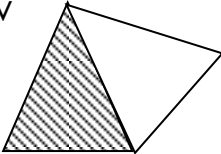

Examples

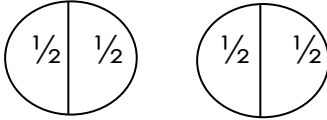
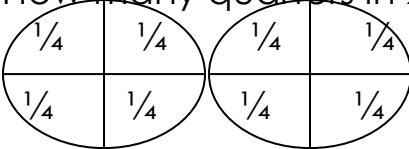
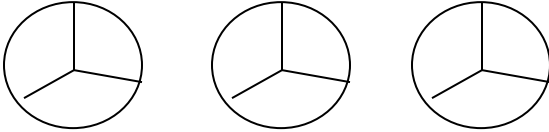













































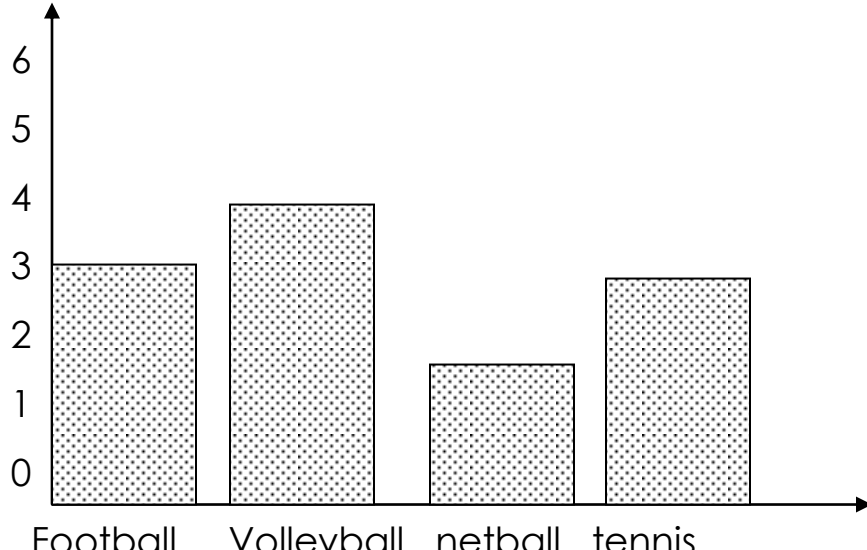
<p>Evaluation activity</p>	<div data-bbox="483 241 1073 804"> </div> <div data-bbox="1101 331 1435 573"> <p> $a = 20 \div 4 = a$ where a is 5 $b = 20 \div 5 = b$ where b is 4 $c = 20 \div 2 = c$ where c is 10 $d = 20 \div 10 = d$ where d is 2 </p> </div> <p>An activity from MK bk3 pg86</p>
<p>Topic Subtopic content</p> <p>Evaluation activity</p>	<p>Lesson 8 Number facts and sequences Filling in the missing numbers Sum at the centre of tables Example The sum at the centre is 15. Find the missing numbers. e.g.</p> <div data-bbox="518 1199 911 1493"> </div> <p>An activity from MK bk3 pg81</p>
<p>Topic Subtopic content</p>	<p>Lesson 9 and 10 Number facts and sequences Filling missing numbers Completing magic square</p>















































Evaluation activity	<p>Examples</p> <table><tr><td>7</td><td>a</td><td>5</td></tr><tr><td>2</td><td>4</td><td>c</td></tr><tr><td>b</td><td>8</td><td>1</td></tr></table> <p>Magic sum = 7 + 4 + 1 = 12 b + 9 + 7 = 12 b + 9 - 9 = 12 - 9 b = 3</p> <p>An activity from MK bk3 pg87</p>	7	a	5	2	4	c	b	8	1							
7	a	5															
2	4	c															
b	8	1															
Topic Subtopic content	<p>Lesson 11</p> <p>Fractions</p> <p>i) Naming fractions</p> <p>Definition</p> <p>A fraction is a part of a whole.</p> <table><tr><td><u>Figure</u></td><td><u>words</u></td></tr><tr><td>1</td><td>a whole</td></tr><tr><td>1/2</td><td>a half</td></tr><tr><td>1/3</td><td>a third</td></tr><tr><td>1/4</td><td>a quarter</td></tr><tr><td>1/5</td><td>a fifth</td></tr><tr><td>2/3</td><td>two thirds</td></tr><tr><td>3/5</td><td>three fifth</td></tr></table>	<u>Figure</u>	<u>words</u>	1	a whole	1/2	a half	1/3	a third	1/4	a quarter	1/5	a fifth	2/3	two thirds	3/5	three fifth
<u>Figure</u>	<u>words</u>																
1	a whole																
1/2	a half																
1/3	a third																
1/4	a quarter																
1/5	a fifth																
2/3	two thirds																
3/5	three fifth																
Evaluation activity	<p>ii) writing fractions in figures</p> <p>a) Three quarters = _____</p> <p>b) Five tenths = _____</p> <p>c) Two fifth = _____</p> <p>d) A third = _____</p> <p>A written exercise</p>																

<p>Topic Subtopic content</p>	<p>Lesson 12 Fractions Comparing fractions Comparing fractions using greater than or less than</p> <p>$\frac{1}{2}$ $\frac{1}{3}$</p>  <p>$\frac{1}{2}$ is greater than $\frac{1}{3}$</p> <p>An activity from MK BK3 pg99-100</p>
<p>Topic Subtopic content</p>	<p>Lesson 13 Fractions Comparing fractions Comparing fractions using symbols i.e. $>$, $<$ or $=$ a) $\frac{1}{10} < \frac{1}{9}$ b) $\frac{1}{4} = \frac{1}{4}$ c) $\frac{1}{5} > \frac{1}{6}$</p>
<p>Topic Subtopic content</p>	<p>Lesson 14 Fractions Shaded and unshaded fractions Examples</p>  <p>(i) Shaded fraction = $\frac{3}{4}$ (ii) Unshaded fraction = $\frac{1}{4}$</p>  <p>(i) Shaded fraction = $\frac{2}{5}$ (ii) Unshaded fraction = $\frac{3}{5}$</p> <p>Evaluation An activity from MK bk3 pg97</p>

<p>Topic Subtopic content</p>	<p>Lesson 15 Fractions Drawing and shading fractions Examples Draw and shade the fractions below</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> $\frac{3}{4}$  </div> <div style="text-align: center;"> $\frac{1}{2}$  </div> </div> <p>Evaluation</p> <p>An activity from pg98</p>
<p>Topic Subtopic content</p>	<p>Lesson 16 Fractions Addition of fractions Examples</p> <p>a) $\frac{1}{4} + \frac{2}{4} = \frac{1+2}{4} = \frac{3}{4}$</p> <p>b) $\frac{5}{10} + \frac{4}{10} = \frac{5+4}{10} = \frac{9}{10}$</p> <p><u>Word problems</u></p> <p>c) Find the sum of $\frac{7}{15}$ and $\frac{4}{15}$</p> $\frac{7}{15} + \frac{4}{15} = \frac{7+4}{15} = \frac{11}{15}$ <p>d) </p> $\frac{1}{3} + \frac{2}{3} + \frac{3}{3} = 1$ <p>Evaluation</p> <p>An activity from MK bk3 pg104 and 103.</p>
<p>Topic Subtopic content</p>	<p>Lesson 17 Fractions Subtraction of fractions Examples</p> $\frac{3}{10} - \frac{2}{10} = \frac{3-2}{10} = \frac{1}{10}$ <p><u>Word problems</u></p> <p>Find the difference between $\frac{13}{16}$ and $\frac{9}{16}$.</p> $\frac{13}{16} - \frac{9}{16} = \frac{13-9}{16} = \frac{4}{16}$

	<p>A boy had $\frac{5}{6}$ of a cake. He ate $\frac{2}{6}$ of it. What fraction remained?</p> $\frac{5}{6} - \frac{2}{6} = \frac{5-2}{6} = \frac{3}{6}$ <p>Evaluation An activity from MK bk3 pg108</p>
Topic Subtopic content	<p>Lesson 18 Fractions Finding number of fractions in a whole Examples a) How many halves are in 2 wholes?</p>  <p>= 4 halves</p> <p>Evaluation An activity from teachers' collection</p>
Topic Subtopic content	<p>Lesson 19 Fractions Finding number of fractions in a whole How many quarters in 2 wholes?</p>  <p>= 8 quarters</p> <p>How many thirds are in three wholes?</p>  <p>= 9 thirds</p>
Topic Subtopic content	<p>Lesson 20 Fractions Fractions of a group Examples What is a $\frac{1}{2}$ of 8? Note: The word 'of' changes to multiply $\frac{1}{2}$ of 8 = $\frac{1}{2} \times 8 = \frac{1 \times 8}{2} = \frac{8}{2} = 8 \div 2 = 4$</p>

Evaluation	An activity from teachers' collection										
Topic Subtopic content	<p>Lesson 21</p> <p>Graphs</p> <p>Pictographs (with a scale and without a scale)</p> <p>Example</p> <p>The pictograph below shows the number of books given to the five best pupils in different games. Study it and use it to answer the questions below.</p> <p> = 2 books</p> <table border="1"> <tbody> <tr> <td>Moses</td><td>  </td></tr> <tr> <td>Alex</td><td> </td></tr> <tr> <td>Jose</td><td>   </td></tr> <tr> <td>Teo</td><td></td></tr> <tr> <td>Harna</td><td>   </td></tr> </tbody> </table> <p>Questions:</p> <p>a) What is the scale on the graph?</p> <p>b) How many books has Moses?</p> <p>$3 \times 2 = 6$ books</p>	Moses	  	Alex	 	Jose	   	Teo		Harna	   
Moses	  										
Alex	 										
Jose	   										
Teo											
Harna	   										
Evaluation	An activity from MK bk3 pg115										
Topic Subtopic Content	<p>Graphs</p> <p>Bar graphs</p> <p>Example</p>  <table border="1"> <caption>Data from Bar Graph</caption> <thead> <tr> <th>Game</th> <th>Number of Books</th> </tr> </thead> <tbody> <tr> <td>Football</td> <td>3</td> </tr> <tr> <td>Volleyball</td> <td>4</td> </tr> <tr> <td>netball</td> <td>1.5</td> </tr> <tr> <td>tennis</td> <td>2.5</td> </tr> </tbody> </table>	Game	Number of Books	Football	3	Volleyball	4	netball	1.5	tennis	2.5
Game	Number of Books										
Football	3										
Volleyball	4										
netball	1.5										
tennis	2.5										

Evaluation activity	<p>a) How many pupils play football? b) Which game is played by most children? c) How many more pupils play football than netball?</p> <p>Activity from MK bk 3 pg 113-115</p>										
Topic Subtopic Content	<p>Lesson 24 Graphs Pictographs Example: the pictograph below shows the number of books given to five best pupils in different games. Study it and use it to answer questions that follow</p> <table border="1"> <tbody> <tr> <td>Moses</td><td>  </td></tr> <tr> <td>Alex</td><td></td></tr> <tr> <td>Josephine</td><td>    </td></tr> <tr> <td>Teo</td><td> </td></tr> <tr> <td>Haruna</td><td>   </td></tr> </tbody> </table> <p> Stands for 10 books</p> <p>a) how many books did Josephine get? b) how many books did Teo get? c) How many more books did Haruna get than Alex? d) Who has the least number of books?</p>	Moses	  	Alex		Josephine	    	Teo	 	Haruna	   
Moses	  										
Alex											
Josephine	    										
Teo	 										
Haruna	   										
Evaluation activity	Mk 2000 MT bk 3 pg 110-111										
Topic Subtopic Content	<p>Lesson 25 Graphs Pictographs Drawing pictographs Example: five girls were told to pick flowers from the garden and each picked the follow</p>										

Evaluation activity	<p>Rose picked 6 flowers Jamila picked 3 flowers Annet picked 2 flowers Sarah picked 6 flowers</p> <p>Questions</p> <ul style="list-style-type: none">a) Make a picture graph and show the information aboveb) Which two girls picked the same number of flowers? <p>Activity in MK 2000 MTC Bk 3 pg 112</p>
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Term III 2015**Breakdown for term III 2015**

1. Geometry

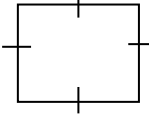
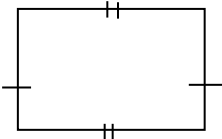
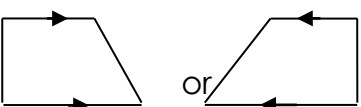
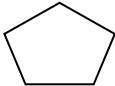
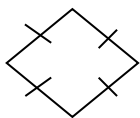
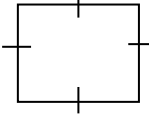
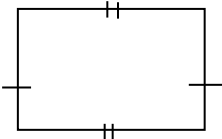
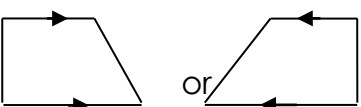
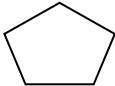
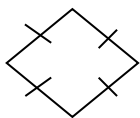
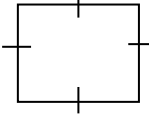
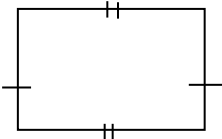
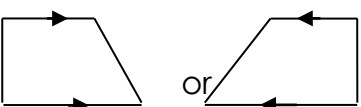
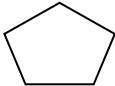
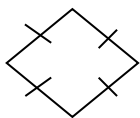
- i) Naming and drawing shapes
- ii) Counting shapes

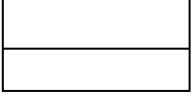
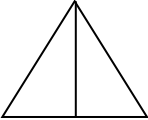
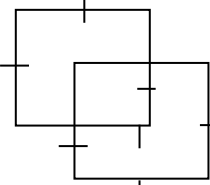
2. Measures

- i) Days of the week
- ii) Telling time
- iii) Months of the year
- iv) Length
 - Addition of metres and centimeters
 - Subtraction of metres and centimeters
 - Changing from metres to centimeters
 - Changing from centimeters to metres
 - Finding perimeter and area
- v) Capacity
 - Changing from litres to centiliters
 - Changing from centiliters to litres
 - Addition of litres and centilitres
 - Subtraction of litres and centiliters
- vi) Weight
 - Estimation of weight
 - Comparing weight
 - Changing from kilograms to grams
 - Changing from grams to kilograms
 - Addition of kilograms and grams
 - Subtraction of kilograms and grams
- vii) Money
 - Addition of money
 - Subtraction of money
 - Shopping
 - Multiplication of money
 - Division of money

- viii) Algebra
 - Finding unknown
 - Addition
 - Subtraction
 - Multiplication
 - Division
 - Word problems
- ix) Collecting like terms


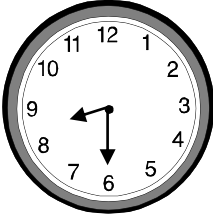
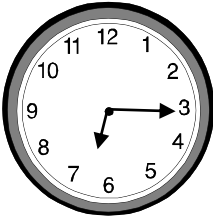
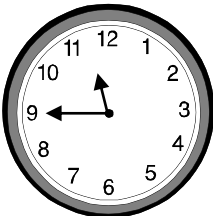
Term III 2015

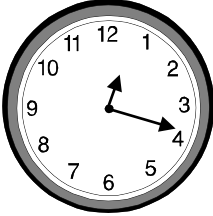
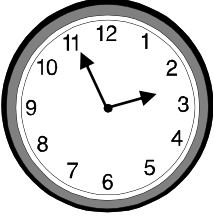
Topic Subtopic content	Lesson 1																	
	Geometry																	
	Types of shapes																	
	Definition																	
	Geometry is a branch of mathematics that deals with the study of shapes and their properties.																	
	<u>Types of shapes</u>																	
	<table><tr><th>Shape</th><th>Name</th><th>Properties</th></tr><tr><td></td><td>Square</td><td><ul style="list-style-type: none">- All sides are equal- Has 4 sides</td></tr><tr><td></td><td>Rectangle</td><td><ul style="list-style-type: none">- Two opposite sides are equal- Has 4 sides</td></tr><tr><td></td><td>Trapezium</td><td><ul style="list-style-type: none">- Two opposite sides are parallel- Has 4 sides</td></tr><tr><td></td><td>Pentagon</td><td><ul style="list-style-type: none">- Has 5 sides</td></tr><tr><td></td><td>Rhombus</td><td><ul style="list-style-type: none">- All sides are equal- Has 4 sides</td></tr></table>	Shape	Name	Properties		Square	<ul style="list-style-type: none">- All sides are equal- Has 4 sides		Rectangle	<ul style="list-style-type: none">- Two opposite sides are equal- Has 4 sides		Trapezium	<ul style="list-style-type: none">- Two opposite sides are parallel- Has 4 sides		Pentagon	<ul style="list-style-type: none">- Has 5 sides		Rhombus
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Evaluation Activity	An activity from Understanding Mathematics BK3 pg63 and MK bk3 p117.																	

<p>Topic Subtopic content</p>	<p>Lesson 2 Geometry Counting shapes Example a) Count the rectangles  = 3 rectangles b) Count the triangles  = 3 triangles c) Count the squares  = 3 squares Evaluation activity An activity from MK bk3 pg118</p>
<p>Topic Subtopic content</p>	<p>Lesson 3 Measures Days of the week Listing the days of the week Sunday Monday Tuesday Wednesday Thursday Friday Saturday Questions a) What is the first day of the week? b) What is the last day of the week? c) Which day of the week comes after the first day of the week? d) Name the day of the week that comes before a day Muslims go for prayers? An activity from MK Bk 3 Pg 126</p>
<p>Topic Subtopic content</p>	<p>Lesson 4 Measures Changing weeks to days Examples How many days are there in 2 weeks?</p>





Evaluation activity	1 week has 7 days 2 weeks have (2 x 7) = 14 days An activity from MK bk3 pg126																																				
Topic Subtopic content	Lesson 5 Measures Changing days to weeks Example Convert 21 days to weeks Solution 7 days make a week 21 days make $\frac{21}{7}$ = 3 weeks																																				
Evaluation	An activity from teachers' own collection																																				
Topic Subtopic content	Lesson 6 Measures Completing tables about days and weeks Examples <table><tr><td>Weeks</td><td>1</td><td>2</td><td>3</td><td>4</td><td></td><td></td><td>7</td></tr><tr><td>Days</td><td>7</td><td>14</td><td></td><td></td><td>35</td><td>42</td><td></td></tr></table> <p>1×7 2×7 $35 \div 7$ 1 - 7 days 14 5</p>	Weeks	1	2	3	4			7	Days	7	14			35	42																					
Weeks	1	2	3	4			7																														
Days	7	14			35	42																															
Evaluation	An activity from MK bk3 pg126																																				
Topic Subtopic content	Lesson 26 Measures Months of the year with their days Listing months of the year <table><tr><td>1. January</td><td>-</td><td>31</td></tr><tr><td>2. February</td><td>-</td><td>28/29</td></tr><tr><td>3. March</td><td>-</td><td>31</td></tr><tr><td>4. April</td><td>-</td><td>30</td></tr><tr><td>5. May</td><td>-</td><td>31</td></tr><tr><td>6. June</td><td>-</td><td>30</td></tr><tr><td>7. July</td><td>-</td><td>31</td></tr><tr><td>8. August</td><td>-</td><td>31</td></tr><tr><td>9. September</td><td>-</td><td>30</td></tr><tr><td>10. October</td><td>-</td><td>31</td></tr><tr><td>11. November</td><td>-</td><td>30</td></tr><tr><td>12. December</td><td>-</td><td>31</td></tr></table>	1. January	-	31	2. February	-	28/29	3. March	-	31	4. April	-	30	5. May	-	31	6. June	-	30	7. July	-	31	8. August	-	31	9. September	-	30	10. October	-	31	11. November	-	30	12. December	-	31
1. January	-	31																																			
2. February	-	28/29																																			
3. March	-	31																																			
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6. June	-	30																																			
7. July	-	31																																			
8. August	-	31																																			
9. September	-	30																																			
10. October	-	31																																			
11. November	-	30																																			
12. December	-	31																																			
Evaluation	Formulated questions by the teacher Mk bk3 pg138																																				

Topic Subtopic content	Lesson 9 Measures Changing years to months Example There are 12 months in a year. How many months are in 2 years? 1 year has 12 months 2 years have (2 x 12) = 24 months Evaluation Mk bk3 pg139												
Topic Subtopic content	Lesson 28 Measures Changing months to years Example How many years are in 36 months? (use repeated subtraction) $\begin{array}{r} 3 \quad 6 \\ -1 \quad 2 \text{ (1 year)} \\ \hline 2 \quad 4 \\ -1 \quad 2 \text{ (1 year)} \\ \hline 1 \quad 2 \\ -1 \quad 2 \text{ (1 year)} \\ \hline 0 \quad 0 \end{array}$ ∴ 3 years are in 36 months. Evaluation An activity from teacher's own collection												
Topic Subtopic content	Lesson 10 Measures Completing tables about months and years Example Complete the table below <table border="1"><tr><td>Years</td><td>1</td><td>2</td><td><u>3</u></td><td>4</td><td>.....</td></tr><tr><td>Months</td><td>12</td><td>24</td><td>36</td><td>.....</td><td>60</td></tr></table> $\begin{array}{l} 2 \times 12 \\ = 24 \text{ months} \end{array} \qquad \begin{array}{l} 36 \div 12 \\ 3 \text{ years} \end{array}$ Evaluation An activity from MK bk3 pg139	Years	1	2	<u>3</u>	4	Months	12	24	36	60
Years	1	2	<u>3</u>	4								
Months	12	24	36	60								
Topic Subtopic content	Lesson 11 Measures How old: (Finding one's age) Example Mike was born in 1989. How old was he in 1997? $\begin{array}{r} 1997 \\ -1989 \\ \hline 0008 \text{ years} \end{array}$ Mike was 8 years old												

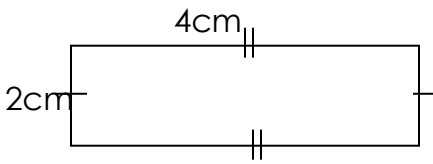
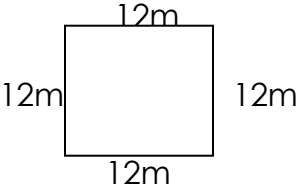
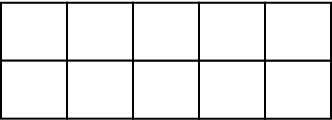
Evaluation	An activity from MK bk3 pg140
Topic Subtopic content	Lesson 13 Measures Telling time Telling time in hours Eg. Tell the time  It is 12 o'clock or 12:00
Evaluation	MK bk 3 pg 127
Topic Subtopic content	Lesson 14 Telling time Telling time in a half past e.g. tell the time  It is a half 8 o'clock or 8:30
Evaluation	MK bk 3 pg 129
Topic Subtopic content	Lesson 15 Telling time Telling time using a quarter past e.g. tell the time  it is a quarter past 7 o'clock or 7:15
Evaluation	MK bk 3 pg 128-129
Topic Subtopic content	Lesson 16 Telling time Telling time using a quarter to e.g. tell the time  it is a quarter to 12 o'clock or 11:45

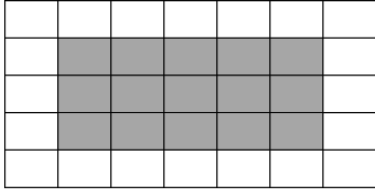
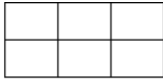
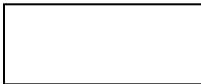
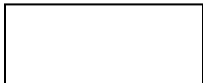
Evaluation	MK bk 3 pg 132
Topic Subtopic content	Lesson 17 Measures Telling time Telling time in minutes past e.g. it is 20 minutes past 12 o'clock 
Evaluation	MK 2000 bk 3 pg 133-134
Topic Subtopic content	Lesson 18 Measures Telling time Telling time in minutes to e.g. it is 5 minutes to 3 o'clock or 2:55 
Evaluation	MK 2000 MTC bk 3 pg 136-137
Topic Subtopic content	Lesson 19 Telling time Word problem e.g change 2 hours to minutes 2 hours = minutes 1 hour = 60 minutes 1 hour = 60minutes or 2 hours = 60 x 2 = 120 minutes 2 hours = 60 x 2 60 <u>X2</u> <u>120</u>
Evaluation	Convert 3 hours to minutes Change 4 hours to minutes How many minutes are there in 5 hours?
Topic Subtopic content	Lesson 20 Telling time Word problem Changing from minutes to hours

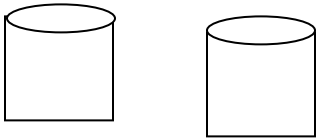
	<p>e.g. convert 120 minutes to hours 120 minutes = hours 60 minutes = 1 hour 120 minutes = $120 \div 60$ $\frac{120}{60} = 2\text{hours}$</p>																								
Evaluation	<p>Change 360 minutes to hours Convert 120 minutes to hours</p>																								
Topic Subtopic content	<p>Lesson 21 Measures Drawing and showing on a clock face Represent e.g. a half past 3 o'clock a quarter to 8 o'clock a quarter past 2 o'clock</p>																								
Evaluation	<p>MK 2000 MTC bk 3 pg 137</p>																								
Topic Subtopic content	<p>Lesson 22 Measures Money Recognition of money</p> <table> <tr> <td><u>Notes</u></td><td><u>Coins</u></td></tr> <tr> <td>1000 note</td><td>50 coin</td></tr> <tr> <td>50,000 note</td><td>100 coins</td></tr> <tr> <td>5000 note</td><td>200 coins</td></tr> <tr> <td>10000 note</td><td>500 coins</td></tr> <tr> <td>20000 note</td><td></td></tr> </table> <p>Addition of money</p> <table> <tr> <td>(1)</td><td>(2)</td></tr> <tr> <td>Shs 200</td><td>shs 1000 + shs 500 + shs 100</td></tr> <tr> <td><u>Shs 50</u></td><td>shs 1000</td></tr> <tr> <td><u>Shs 250</u></td><td>shs 500</td></tr> <tr> <td></td><td>+ shs 100</td></tr> <tr> <td></td><td><u>Shs 1600</u></td></tr> </table>	<u>Notes</u>	<u>Coins</u>	1000 note	50 coin	50,000 note	100 coins	5000 note	200 coins	10000 note	500 coins	20000 note		(1)	(2)	Shs 200	shs 1000 + shs 500 + shs 100	<u>Shs 50</u>	shs 1000	<u>Shs 250</u>	shs 500		+ shs 100		<u>Shs 1600</u>
<u>Notes</u>	<u>Coins</u>																								
1000 note	50 coin																								
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	+ shs 100																								
	<u>Shs 1600</u>																								
Evaluation	<p>An activity from MK bk3 pg176 and 178</p>																								
Topic Subtopic content	<p>Lesson 23 Measures Money Addition of money (word problems) Examples I had 100 shillings. My father gave me 50 shillings more. How much money do I have altogether? I had 100 shillings</p>																								

Topic Subtopic content	Lesson 26 Topic: Measures Subtopic: Money Content: Shopping with pictorial Example A bag  Shs 500 an apple  shs 800 A pencil  shs 100 a book  shs 300 a) What is the cost of 2 pencils? Shs 100 x 2 = shs 200 b) What is the cost of 3 bags and 2 books? Bags = 3 x 500 = shs 1500 Books = 2 x 300 = + shs 600 Shs 2100
Evaluation	From understanding mathematics bk 3 pg 73.
Topic Subtopic content	Lesson 27 Measures Money Division of money Examples Divide shs 1200 by 3 <div><div><div>0400</div><div>3 1200</div><div>0 x 3 = 0</div><div>12</div><div>4 x 3 = 12</div><div>00</div></div><div>∴ shs 1200 ÷ 3 = shs 400</div></div>
Evaluation	MK bk3 pg187
Topic Subtopic content	Lesson 28 Measures Money Word problems involving division of money Example Mr. Kasule had shs 800. He shared it equally between his two children. How much did each child get?

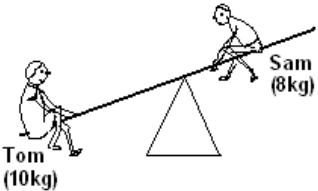
Evaluation	Activity in Mk 2000 Mtc bk 3 pg 14
Topic Subtopic Content	Lesson 32 Measures Word problem involving addition of metres and centimeters Example; A shopkeeper has 2m 38cm of nylon cloth and 6m 30cm of cotton cloth. What is the total length of the pieces of cloth. $\begin{array}{r} \text{M} \quad \text{cm} \\ 2 \quad 38 \\ + 6 \quad 30 \\ \hline 8 \quad 68 \end{array}$
Evaluation	Activity in MK 2000 bk 3 pg 148
Topic Subtopic Content	Lesson 33 Measures Subtraction of metres and centimeters Example $\begin{array}{r} \text{M} \quad \text{cm} \\ 6 \quad 50 \\ - 4 \quad 30 \\ \hline 2 \quad 20 \end{array}$
Evaluation	Activity Mk 2000 MTC bk 3 pg 149
Topic Subtopic Content	Lesson 34 Measures Word problem involving subtraction of metres and centimeters Example Musa had a string of 8m 47cm. he cut off 2m 16cm. what length of the string was left? $\begin{array}{r} \text{M} \quad \text{cm} \\ 8 \quad 47 \\ - 2 \quad 16 \\ \hline 6 \quad 31 \end{array}$
Evaluation	Activity in Mk bk 3 pg 150
Topic Subtopic Content	Lesson 35 Measures Finding perimeters Perimeter Definition: perimeter is the total distance around any give figure

Evaluation	<p>Example Find the perimeter of the figure below</p>  <p> $P = s+s+s+s$ $4\text{cm} + 2\text{cm} + 4\text{cm} + 2\text{cm}$ $6\text{cm} + 6\text{cm}$ $= 12\text{cm}$ </p> <p>Activity in MK bk 3</p>
Topic Subtopic Content	<p>Lesson 36 Measures Word problems involving finding perimeter of a shape Example A square garden measures 12m each side. Find its perimeter</p>  <p> $P = s+s+s+s$ $= 12\text{m} + 12\text{m} + 12\text{m} + 12\text{m}$ $= 24\text{m} + 24\text{m}$ $= 24\text{m}$ $\quad + 24\text{m}$ $\hline 48\text{m}$ </p>
Evaluation	<p>Activity in MK MTC bk 3</p>
Topic Subtopic Content	<p>Lesson 37 Measures Finding area Example ; counting squares</p>  <p>Area = number of square units 12sq units.</p>
Evaluation	<p>Activity in MK MTC bk 3 pg 152</p>

Topic Subtopic Content	Lesson 38 Measures Finding area of the shaded part Example; area = number of sq units = 15 sq. units 
Evaluation	Activity in MK MTC bk 3 pg 155
Topic Subtopic Content	Lesson 39 Measures Finding the area by multiplying Example; area = number of sq. units = (3 squares across)x(2squares down) = 3×2 = 6 squares units or 6 sq. units  Example 2; area = length x width 8cm 8cm x 3cm  3cm 24cm ² or 24 sq. centimeters
Evaluation	Activity in MK bk 3 pg 155-156
Topic Subtopic Content	Lesson 40 Measures Word problem involving finding area Example Mary's note book is 4cm long and 3cm wide Find its area 4cm area = L x W  3cm = 4cm x 3cm = 12cm ²
Evaluation	Activity in Mk MTC bk 3 pg 157-158
Topic Subtopic Content	Lesson 41 Capacity Energy in our sub county

Evaluation	<p>Example: How many $\frac{1}{2}$ litres make a litre.</p>  <p>$\frac{1}{2}$ litre + $\frac{1}{2}$ litre = 1 litre Therefore, 1 litre = 2 halves New MK bk 3 pg 161</p>								
Topic Subtopic Content	<p>Lesson 42 Capacity Changing litres to centilitres 1 litre = 100cl 3 litres = (3x100)cl 3litres = 300cl</p>								
Evaluation	Teachers collection								
Topic Subtopic Content	<p>Lesson 43 Capacity Changing centiliters to litres Example: How many litres are in 500cl? 1 litre = 100cl ? = 500cl $\frac{500\text{cl}}{100\text{cl}}$ litres = 5 litres</p>								
Evaluation	Teacher's collection								
Topic Subtopic Content	<p>Lesson 44 Capacity Adding litres and centiliters Example; Add; $\begin{array}{r} 1\ 5\ 0\ \text{litres} \\ +\ 3\ 5\ 0\ \text{litres} \\ \hline 5\ 0\ 0\ \text{litres} \end{array}$ Example 2 Add; <table> <tr> <td>Litres</td> <td>centiliters</td> </tr> <tr> <td>3</td> <td>25</td> </tr> <tr> <td>+2</td> <td>60</td> </tr> <tr> <td><u>5</u></td> <td><u>85</u></td> </tr> </table></p>	Litres	centiliters	3	25	+2	60	<u>5</u>	<u>85</u>
Litres	centiliters								
3	25								
+2	60								
<u>5</u>	<u>85</u>								
Evaluation	Teachers' collection								

Topic Subtopic Content	Lesson 45 Capacity Word problem involving addition of litres. Mr. Lubega made 24 litres of juice and Kato made 78 litres. How much juice did the two men make? $\begin{array}{r} 24 \text{ litres} \\ +78 \text{ litres} \\ \hline 102 \text{ litres} \end{array}$ Therefore, they made 102 litres of juice
Evaluation	New MK nk 3 pg 163
Topic Subtopic Content	Lesson 46 Capacity Subtraction of litres and centiliters Example: $\begin{array}{r} 247 \text{ litres} \\ - 25 \text{ litres} \\ \hline 222 \text{ litres} \end{array}$
Evaluation	
Topic Subtopic Content	Lesson 47 Measures Weight Definition : weight is the lightness or heaviness of an object. Units measuring weight Examples Kilograms Grams Hectogram Changing kilogram to grams Example Change 3kg to grams $\begin{array}{l} 1\text{kg} = 1000\text{g} \\ 3\text{kg} = 1000\text{g} \end{array}$ $\begin{array}{r} 1000\text{g} \\ 1000\text{g} \\ + 3000\text{g} \end{array}$ $\begin{array}{r} 1\text{kg} = 1000\text{g} \\ 3\text{kg} = 1000\text{g} \end{array}$ $\begin{array}{r} \times 3 \\ 3000\text{g} \end{array}$
Evaluation	Activity in MK MTc bk 4
Topic Subtopic Content	Lesson 48 Measures Weight Changing from grams to kilograms Example Change 2000g to kilograms

Evaluation	$1000\text{g} = 1\text{kg}$ $2000\text{g} = \left(\frac{2000\text{g}}{1000\text{g}}\right) \text{kg} = 2\text{kg}$
Topic Subtopic Content	Lesson 49 Measures Weight Comparing weight Who is heavier? Example 
Evaluation	Activity in MK MTC bk 3 pg 168
Topic Subtopic Content	Lesson 50 Measures Weight Addition of kilograms and grams Example $\begin{array}{r} \text{Kg} \quad \text{g} \\ 4 \quad 250 \\ +2 \quad 300 \\ \hline 6 \quad 550 \end{array}$
Evaluation	Activity in MK bk 3 pg 171
Topic Subtopic Content	Lesson 51 Measures Weight Word problem involving addition of kilograms and grams Example Kato weighs 17kg 280 g. his sister weighs 20kg 250g. find their total weight. $\begin{array}{r} \text{Kg} \quad \text{g} \\ 17 \quad 280 \\ +20 \quad 250 \\ \hline 37 \quad 530 \end{array}$
Evaluation	Activity in MK bk 3 pg 172
Topic Subtopic Content	Lesson 52 Measures Weight Subtraction of kilograms and grams

Evaluation	<p>Example</p> $\begin{array}{r} \text{Kg} \quad \text{g} \\ 9 \quad 650 \\ -7 \quad 200 \\ \hline 2 \quad 450 \end{array}$ <p>Activity in Mk bk 3 pg 173</p>
<p>Topic Subtopic Content</p>	<p>Lesson 53 Measures Weight Word problems involving subtraction of kilograms and grams Example Akot had 5kg 750g of salt. She gave 3kg 250g to her friend. How much salt was left?</p> $\begin{array}{r} \text{Kg} \quad \text{g} \\ 5 \quad 750 \\ -3 \quad 250 \\ \hline 2 \quad 500 \end{array}$ <p>Activity in Mk bk 3 pg 174</p>
<p>Topic Subtopic Content</p>	<p>Lesson 54 Algebra Finding missing numbers Example $\square + 3 = 8$ $\square + 3 - 3 = 8 - 3$ $\square + 0 = 5$ $\quad = 5$ </p> <p>Activity Mk bk 3 pg 192</p>
<p>Topic Subtopic Content</p>	<p>Lesson 55 Algebra Word problems involving algebra Example Nakito had some books. She was given 12 more books. Now she has 20 books. How many books had Nakito had at first?</p> $\begin{array}{l} \square + 12 = 20 \\ + 12 - 12 = 20 - 12 \\ + 0 = 8 \\ \quad = 8 \end{array}$ <p>Nakito had 8 books first</p> <p>Activity MK bk 3 pg 192</p>

Topic Subtopic Content	Lesson 56 Algebra Finding unknowns involving subtraction Example $M - 5 = 3$ $M - 5 + 5 = 3 + 5$ $M - 0 = 8$ $M = 8$
Evaluation	Activity in Mk mtc bk 3 p 194
Topic Subtopic Content	Lesson 57 Algebra Word problems involving subtraction of unknowns Example Father had some mangoes. He gave 5 mangoes to his son. He remained with 7 mangoes. How many mangoes did he have at first? $\square - 5 = 7$ $\square - 5 + 5 = 7 + 5$ $\square - 0 = 12$ $\quad = 12$ He had 12 mangoes at first.
Evaluation	Activity in Mk mtc bk 3 pg 194
Topic Subtopic Content	Lesson 58 Algebra Finding missing numbers in multiplication Example $\square \times 2 = 10$ $\square \times 2 \div 2 = 10 \div 2$ $\square \times 1 = 5$ $\quad = 5$
Evaluation	Activity in MK bk 3 pg 196
Topic Subtopic Content	Lesson 59 Algebra Finding missing numbers involving division Example $6 \div \square = 3$ $\square = 6 \div 3$ $\square = 2$
Evaluation	Activity in Mk mtc bk 3 pg 197

Topic Subtopic Content	Lesson 60 Algebra Word problems involving finding missing numbers with division Example Auma had some bananas. He shared them among 6 boys. Each boy got 8 bananas. How many bananas had Auma had before? $\div 6 = 8$ <input type="text"/> $= 8 \times 6$ <input type="text"/> $= 48$ Auma had 48 bananas before
Evaluation	Activity in Mk mtc bk 3 pg 198
Topic Subtopic Content	Lesson 61 Algebra Collecting like terms Example Collect like terms 3 cups + 2 books + 4 cups + 3 books 3 cups + 4 cups + 2 books + 3 books 7 cups + 5 books
Evaluation	Activity in MK mtc bk 4