VICTORIOUS PRIMARY SCHOOLS

**LESSON NOTES FOR MATHEMATICS P.4 TERM I 2018**

**LESSON 1**

**TOPIC I: SET CONCEPTS**

**SUB TOPIC: REVISION OF SETS**

**CONTENT: Definition**

A set is a collection of well defined objects.

An element is an object or a thing which belongs to a set.

Naming sets

* A set of tomatoes
* A set of bags
* A set of oranges

Counting members in a set

**Examples**

B

p q r Set B has 5 members therefore n(B) = 5 members

t s **∴n(B) = 5 members**

X = {r, s, t} set X has 3 members

Therefore n(x) = 3 members.

.

**ACTIVITY:** Exercise on page 1 Nos. 1 – 8 (MK MTC bk 4)

Remarks.

**LESSON 2: CONTENT:** Equivalent and non-equivalent sets.

Equivalent sets are sets with the same number of members but they are not the same

Symbol

**Example.**

M = (1, 2, 3, 4) N= (a, e,i, o)

Set M is equivalent to set N

Or M N

**Note:** Equivalent sets are also called matching sets.

**Non – Equivalent sets**

These are sets which do not have the same number of members.

**Symbol**

**Example**

P = {a, b, c} Q = {p, q, u, s}

Set P and Q are non – equivalent, non matching sets.

**Activity: Exercise 1 (MK New edition) page 6.**

**Remarks.**

**LESSON 3:**

**TOPIC: SET CONCEPTS**

**SUB-TOTAL: TYPES OF SETS**

**CONTENT: EQUAL SETS AND EQUIVALENT SETS**

**Equal sets:**

Equal sets are sets which have the same number of elements which are exactly the same.

**Examples:**

D E

Symbol =

Set D and E are equal sets

**Equivalent sets.**

Equivalent sets are sets with the same number of members but they are not the same.

**Examples:**

Set A = (a, b, c, d) B =(1, 2, 3, 4)

Set A and B are equivalent sets.

Symbol

**ACTIVITY**: Exercise 1G page 8 (MK New Edition)

**LESSON 4:**

**CONTENT: EMPTY SETS**

Empty sets are sets which do not have members or a set whose members cannot be found.

Symbol or ( )

**Examples**

1. R S

1, 5, 7

Set R is an empty set.

(b) A set of goats with 5 legs each is an empty set.

**ACTIVITY:** Exercise 1b and 1 C page 2 (Mk New edition)

**Remarks.**

**LESSON 5:**

**CONTENT: Even and Odd sets.**

Even sets are sets whose members can all be paired

**Example:**

**P**  Set P has 4 members.

Members of set P have all been paired; therefore it is an even set.

**Note:** An empty set is an even set.

**Odd sets**

Odd sets are sets whose members can not all be paired.

**Example:**

**U**  Not all members of set U have been paired. Therefore it is an odd set.

**ACTIVITY:** Exercise 1(d) and 1 (e) page 3 and 4 (New Edition of MK)

**Remarks:**

**LESSON 6:**

**SUBTOPIC : INTERSECTION OF SETS.**

**CONTENT: Symbol for intersection** ∩

Intersection sets have common members of two sets

**Examples:**

**P** = (a, b, c, d, e) **q** = (a, e, i, o ,u)

Find (i) P ∩ Q. = (a, e)

n (P ∩ Q) = 2 element

**Note:** Sets without common members are non – intersecting sets.

**Examples**

W = (1, 2, 3, 4) N = (a, b, c)

Set W and N are non – intersecting sets.

**Drawing venndiagrams and shading the intersection.**

**Example:-**

**- Shading the intersection set.**

**A B**

A ∩ B is shaded.

**ACTIVITY**:

Exercise 1H page 10 (MK New edition) or Exercise 7 page 10 (Oxford Primary MTC Bk 4)

**Remarks**

**LESSON 7: Listing members in the intersection**

**Example:**

**Set U Set V**

**1.**

**U V**

0 2 1 7

4 3 5 9 ∴ U ∩ V = {1, 3, 5}

2. Set D = {p, q, r, s, t }

Set E = {f, g, r, p }

∴ D ∩ E = {p, r}

Number of elements in the intersection

**Examples:**

Set S = ( g, o, a, t ) T = ( r, o, t)

S ∩ T = (o, t) Therefore; number of elements in the intersection set are 2.

n(S∩T) = 2 elements

Set

X Y

X Y

b, u

l, f

o, a

X ∩Y = (l, f)

∴n(X ∩Y) = 2 elements

**LESSON 8:**

**CONTENT: UNION OF SETS AND INTERSECTION**

A Union set is a collection of all the members in the given sets.

Symbol; U

Listing of members in union sets.

**Examples**

If P = (a, e, i, o, u) Q = (a, b, c, d, e)

What is P U Q?

P ∪ Q = (a, e, i, o, u, b, c, d)

**N.B**: All common members are written once.

Drawing venn diagrams and shading.

**Examples:**

G H

Shade G ∪ H

G H Listing members of the union set

**Example:**

G H

G H

f e

I s e

h f

G ∪ H = (i, s, f, h, e, e, t)

∴ Number of elements in the union set are 7

**n(G∪H) = 7 elements.**

**LESSON 9: DIFFERENCE OF SETS**

**Example:**

Set A = ( 1, 2, 3, 4, 5)

B = ( 0, 2, 4, 6, 8)

**Note:** Members of a given set only is got without common members.

Find members of

1. Set A only = {1, 3, 5}
2. Set B only = {0, 6, 8}

Members of set A only is represented by A – B

Members of set B only is shown as B – A

**Showing the difference of sets on venn diagrams.**

A ∩ B A ∪ B

**A B**

A only (A – B) B only ( B – A)

A B A B

Set A Set B

**ACTIVITY:**

Draw and shade these regions

1. A but not B
2. A ∪ B
3. Set B
4. B – A
5. A - B

**LESSON 10:**

**CONTENT: PUTTING SETS ON A VENN DIAGRAM**

**Examples:**

X = (1, 2, 3, 4, 5)

Y = (0, 2, 4, 6, 8)

Represent the two sets on a venn diagram.

**A** **B**

1 3 0 6

5 2 4 8

**List members of**

X only = {1, 3, 5}

Y – X ={0, 6, 8}

X∩ Y = {2, 4}

**ACTIVITY**

Set M = {a, b, c, d, e}

N = {a, e, i, o, u}

(a) Represent the two sets on the venn diagram below

(b) Use your venn diagram to answer the following:-

1. M ∩ N (v) P - Q
2. M ∪ N (vi) n(Q – P)
3. N(P only) (vii) n(Q only)
4. N(Q)

**REMARKS**

**LESSON 11:**

**SUB TOPIC SUBSETS**

**CONTENT:**

**Definition**

A subset is a set of members got from a given set.

An empty set is a subsetof any set

A set is a subset of itself (its called a super set).

Symbol

⊆

Symbol for not subset

⊆⊆⊆

Listing subsets

Set P = {1, 2, 3}

The subsets are:;

{}, {1, 2, 3}, {1, 3}, {2, 3}, {1 }, {2 }, {3 }, {1, 2 },

Number of subsets 8

**REMARKS**

**LESSON 12**

**TOPIC : NUMERATION SYSTEMS AND PLACE VALUES**

**SUB TOPIC: PLACE VALUES**

1. In words

**Example**

MK Primary Mathematics book 4 (Old Edition) Exercise 2b page 20.

(i) 4 5 6 3

Ones

Hundreds

Tens

Thousands

**In figures**

(ii) 3 6 5 8 2

1

10

100

1000

10000

(iii) Representing numbers on abacus.

**Example**

**6 3 7 0**

**TH H T O**

**6 3 7 0**

**LESSON 13**

**SUBTOPIC: VALUES OF DIGITS IN NUMBERS**

**Example: 1**

What is the value of each in the number

7 4 6 3 2

TTH TH H T O

2 x 1 = 2

3 x10= 30

6 x100= 600

4 x1000 = 4000

7 x10000 = 70000

**Example 2**

What is the value of 5 in the number

3 1 5 9

**TH H T O**

3 1 5 9

5 x 10 50

Expanding numbers using place values

Example:

Expand 3 7 4 6 using its place values

|  |  |  |  |
| --- | --- | --- | --- |
| TH | H | T | O |
| 3 | 7 | 4 | 6 |

1

10

100

1000

( 3 X 1000) + ( 7 X 100) + ( 4 X 10) + ( 6 X 1)

**ACTIVITY**

MK Primary Mathematics Book 4 page 24

Exercise 2f

**EXPANDING NUMBERS USING VALUES**

Example

Expand 95614 using its values

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| T/TH | TH | H | T | O |
| 9 | 5 | 6 | 1 | 4 |

4 x 1 = 4

1 x 10 = 10

6 x 100 = 600

5 x 1000 = 5000

9 x 10000 = 90000

∴ 95614 = 90000 + 5000 + 600 + 10 + 4

**ACTIVITY**

MK Primary mathematics Book 4 Page 24

**LESSON 14:**

**SUB TOPIC :EXPANDED NUMBERS**

**Examples:**

(a) What number has been expanded to give

(7 x 1000) + ( 4 x 100) + ( 3 x 10 ) + ( 8 x 1)

7000 + 400 + 30 + 8

= 7438

(b) What number has been expanded to give

(2 x 10000) + ( 3 x 1000) + ( 2 x 10 ) + ( 1 x 1)

20000 + 3000 + 20 + 1

= 23021

**ACTIVITY**

What number has been expanded.

(i) 500 + 70 + 2

(ii) 3000 + 400 + 90 + 2

(iii) (1 x 10,000) + (6 x 100) + (8 x 10) + (3 x 1)

(iv) (7 x 1000) + (9x 100) + (4 x 1)

(v) 5000 + 70 + 8

**REMARKS.**

**LESSON 15**

**SUB TOPIC : WRITING FIGURES IN WORDS**

**CONTENT : Example:**

1. Write 4 3 2 6 in words

|  |  |  |  |
| --- | --- | --- | --- |
| TH | H | T | O |
| 4 | 3 | 2 | 6 |

Forty thousand three hundred twenty six

1. Write 65702 in words

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TTH | TH | H | T | O |
| 6 | 6 | 0 | 6 |  |

Sixty five thousand seven hundred two.

**ACTIVITY**

MK Primary Mathematics (old edition) page 21 – 22

**LESSON 16**

**SUB TOPIC : WRITING WORDS IN FIGURES**

**CONTENT**

**Examples**

1. Write twelve thousand four hundred seventy two

|  |  |  |  |
| --- | --- | --- | --- |
| TH | H | T | O |
| 12 | 4 | 7 | 2 |

12000

400

70

+ 2

12472

2x1 = 2

7 x10 = 70

4 x100 = 400

12 x100 = 12000

**ACTIVITY**

MK Primary Mathematics (old edition) page 22

Exercise 2e

REMARKS.

**LESSON 17**

**SUB TOPIC :ROUNDING OFF TO THE NEAREST TENS**

**Below is 0 – 10 numberline**

**Round down numbers≈**

**Note that 4,3,2 and 1 are nearer 0 than 10, so they are rounded down to 0**

**Round up numbers**

**Note that 5,6,7,8 and 9 are nearer 10 than 0, so they are rounded up to 10**

**Examples**

1. **Round off 43 using a numberline to the nearest tens**

**43 is between 40 and 50**

**43 is rounded down to 40 or 43≈ 40**

1. **Round off 68 to the nearest tens using a numberline**

**68 is between 60 and 70**

**68 ≈ 70**

**Activity**

**Round off the following to the nearest tens**

1. **56 IV) 95**
2. **24 V) 41**
3. **88 VI) 127**

**LESSON : 19**

**S / Topic: Rounding off to the nearest hundreds**

**Below is 0 – 100 numberline**

**Examples**

**1. Round off 182 to the nearest hundreds**

**182 is between 180 and 200**

**182 ≈ 200**

**2. round off 325 to the nearest hundreds**

**325 is between 300 and 400**

**325 ≈ 300**

**Activity**

**Round off the following numbers to the nearest hundreds**

**I) 270 III) 862**

**II) 638 IV) 198**

**Ref; MK Primary MTC bk 4 pages 28 ( Transition class)**

**LESSON**

**TOPIC : NUMERATION SYSTEM AND PLACE VALUE**

**SUB TOPIC : ROMAN NUMERALS**

**CONTENT: Basic Roman Numerals**

**Example:**

|  |  |
| --- | --- |
| **Hindu Arabic** | **Roman Numerals** |
| 1  2  3  4  5  6  7  8  9 | I  ii  iii  iv  v  vi  vii  viii  ix |

Roman numerals got by repeating 1 or x.

2 = I + I = II = 20 = 10 + 10 = XX

3 = I + I + I = III = 30 = 10 + 10 + 10 = XXX

**Roman numerals got by adding to 5**

6 = 5 + 1 7 = 5 + 2 8 = 5 + 3

6 = VI 7 = VII 8 = VIII

**Roman numerals got by adding to 5**

6 = 5 + I 7 = 5 + 2 8 = 5 + 3

6 = VI 7 = VII 8 = VIII

The roman numerals got by subtracting from 5 or from 50.

4 = 1 subtracted from 5

4 = IV

40 = 10 subtracted from 50

40 = XL

The roman numerals got by subtracting from 10 e.g. 9 = 1 subtracted from 10.

9 = IX

**LESSON :20**

Changing from Hindu – Arabic numerals to Roman numerals

**Examples:**

(a) 19 = 10 + 9 (b) 44 = 40 + 4

X + IX XL + IV

= XIX = XLIV

**Activity:** Mk Primary Mathematics (New Edition book 5 page 34.

Changing roman numerals into hindu Arabic numerals.

**Example 1 Example 2**

XIV = X + IV Change XXXIX to Hindu Arabic

= 10 + 4 XXXIX = XXX + IX

30 + 9

XIV = 14 XXXIX = 39

**ACTIVITY:** MK primary mathematics book 4 (New Edition) page 34.

**LESSON :21**

**SUB TOPIC : APPLICATION OF ROMAN AND HINDU ARABI NUMERALS**

**Example:**

(a) Henrys’ age is 8. Write his age in roman numerals.

8 = VIII

(b) Mukiibi’s vehicle has been driven for 24 months. Write the months in roman numerals.

24 months

24 = 20 + 4

24 = XX + IV

24 = XXIV

**ACTIVITY: MK Primary mathematics bk 4 (New Edition) page 35**

**LESSON 22**

**SUBTOPIC : ADDITION OF ROMAN NUMERALS**

**Examples**

i) IX + V (ii) 14 = 10 + 4

= 9 + 5 = X + IV

= 14 = XIV

iii) XX + VII (iv) 29 = 20 + 9

= 20 + 7 = XX + IX

= 27 = XXIX

**Subtraction of Roman numerals**

**Examples**

1. XXXVI - XXII (b) 14 = 10 + 4

= 30 + 6 - 20 + 2 = X + IV

36 – 22 = XIV

14

(c) IX - V (d) 45 = 40 + 5

= 9 - 5 XL + V

= 4 = XLIV

**ACTIVITY :**

1. XXXIV + XLV
2. XV + XXIX
3. XCII + XL
4. XXV – V
5. XXIV – XVI
6. XLIX - XII

**LESSON 23**

**TOPIC : OPERATION ON NUMBERS**

**SUBTOPIC : Adding up to ten thousand**

**Examples**

1. Add: 7464 + 4425

Arrange these numbers in their place values

TH H T O

7 4 6 4

+ 4 4 2 5

11 8 8 9

1. Add: 4622 + 5043 + 6231

TH H T O

4 6 2 2

5 0 4 3

+ 6 2 3 1

15 8 9 6

**ACTIVITY :** MK Primary 4 book page 38 exercise 39 (New edition)

**LESSON : 24**

**More addition of numbers**

**Example:**

(i) **Add:**

* Arrange numbers in their place values
* Add by regrouping all numbers (answers) that exceed 9

TH H T O

1 3 7 8

+ 5 8 9

1 9 6 7

(ii) TTH TH H T O

1 4 3 3 1

+ 2 6 5 1

1 6 9 8 2

**ACTIVITY: MK Primary mathematics (New Edition) book 4 page 39. Exercise 3b**

**LESSON : 25**

**Addition with word problems**

**Example:**

1. Alice carried 349 books, her brother carried 578 books. How many books were carried altogether?

Alice carried = 349 books

Her brother = 578 books

Both carried = 927 books

(ii) Maria bought sugar for shs. 15,000. Soap at shs. 800 and a bunch of Matooke at shs. 3500. How much money did she spend?

Sugar shs. 15,000

Soap shs. 800

Matooke Shs 3500

Total Expenditure sh. 19,300

**ACTIVITY: Exercise 3c (MK Primary mathematics book 4 (New Edition) pg. 40**

**LESSON 26**

**SUB TOPIC: SUBTRACTION**

**Examples 1:**

1. 246 - 192

* Arrange numbers vertically by their place values.
* Subtract impossible numbers by borrowing.

H T O

2 4 6

- 1 9 2

0 5 4

**Example 2.**

2. 530 - 254

* Arrange numbers vertically in their place values.
* Subtract by borrowing.

H T O

5 3 0

- 2 5 4

2 7 6

**ACTIVITY: Exercise 3d (MK primary book four page 42 (New Edition)**

**LESSON: 27**

**SUB TOPIC: SUBTRACTION OF LARGER NUMBERS**

**Example:**

(i) 10246 -3118

TTH TH H T O

1 0 2 4 6

- 3 1 1 8

**ACTIVITY:**

Exercise 3e (MK Primary book four page 44 (New Edition)

REMARKS:

**7 1 2 8**

(ii) 24035 - 3727

TTH TH H T O

2 4 0 3 5

- 3 7 2 7

2 **0 3 0 8**

**LESSON: 28**

**SUB TOPIC: APPLICATION OF SUBTRACTION**

**Example:**

What is the difference between 243 and 37?

2 4 3

- 3 7

2 0 6

(ii) Katabula had shs. 2500. He bought a book for 350. What was his change?

Katabula had - 2500

He paid - 350

His change - 2150

**ACTIVITY:** Exercise 3f (MK primary mathematics book four page 45 (Old edition)

REMARKS

**LESSON: 29**

**TOPIC: OPERATION ON NUMBERS**

**SUB TOPIC MULTIPLICATION**

Other words that call for multiplication are: product, times.

**CONTENT:** Multiplying by one digit

**Example 1:**

1. 4 3 4 6 (ii) 1 0 (iii) 4 3

x 3 x 2 x 4

13 0 3 8 2 0 1 7 2

(iv) 1 4

**ACTIVITY:** New Edition MK Primary Mathematics bk 4 page 46

x 8

1 1 2

REMARKS:

**LESSON: 30**

**Word problems involving multiplication by one digit.**

**Example:**

1. Juma is paid shs. 6960 a day. How much will he get if he works for 7 days.

**Solution:**

1 day he gets shs. 6960

7 days he gets 6 9 6 0

**∴He gets 48, 720 in 7 days.**

x 7

Shs. 4 8 7 2 0

**ACTIVITY:** Exercise 3g No. 1 – 3 page 46 and 3h 1 – 5 page 47 (MK New Edition)

**LESSON: 31**

**Multiplication as repeated addition**

**CONTENT:**

Example:

(a) 4 x 2 = 2 + 2 + 2 + 2

= 8

(b) 3 + 3 + 3 + 3 = 4 x 3

= 12

**ACTIVITY:**

Use repeated addition to multiply the following:-

1. 3 x 2

**Complete**

1. 2 + 2 + 2 + 2 = \_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_
2. 4 + 4 + 4 + 4 =\_\_\_\_\_\_\_\_\_\_\_\_x \_\_\_\_\_\_\_\_
3. 3 + 3 + 3 + 3 + 3 \_\_\_\_\_\_\_\_\_\_x \_\_\_\_\_\_\_\_
4. 8 + 8 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x \_\_\_\_\_\_\_\_
5. 9 + 9 + 9 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_
6. 6 x 4
7. 4 x 3
8. 5 x 3
9. 8 x 2

REMARKS

**LESSON 32**

**SUB TOPIC : DIVISION**

**CONTENT : DIVISION AS REPEATED SUBTRACTION**

Example

1. 12 ÷ 3 = 12 – 3 = 9

9 - 3 = 6 count the number of times you subtract 3 division from the

6 - 3 = 3 dividend until you get “o” is the answer

3 - 3 = 0 ∴12 ÷3 = 4 times

**ACTIVITY :**Exercise 3l page 53 (MK New Edition)

**LESSON 33**

**TOPIC : OPERATION ON NUMBERS**

**SUB TOPIC : DIVISION WITHOUT REMAINDER**

**CONTENT:**

Example 1: Divide 4804 by 4.

1201

Example 2:124 ÷ 4

√1 2 4

3 x 4 = 1 2

4

1 x 4 = 4

31

√4 8 0 4

1 x 4 = 4

0 8

2 x 4= 0 8

0

0

4

1 x 4 = 4

**ACTIVITY:** Exercise 3m page 53 (Mk New Edition).

**LESSON 34**

**SUBTOPIC : WORD PROBLEMS INVOLVING DIVISION WITHOUT REMAINDERS**

**CONTENT : Examples**

1. There are 120 oranges in 2 bags. How many oranges are in each bag?

**Divide**

**Example 2**

Divide 246 text books among 3 classes

√2 4 6

0 x 3 = 0

2 4

8 x 3 = 2 4

6

2 x 3 = 6

Each gets 82 books.

Example 1:

060

082

2

√1 2 0

3

0 x 2 = 0

1 2

6 x 2 = 1 2

0

0 x 2 = 0

Each bag has 60 oranges

**ACTIVITY:** Exercise 3p (New Edition) MK Primary Mathematics book 4 page 55

**LESSON 35**

**SUB TOPIC : DIVISION WITH REMAINDERS**

**CONTENT:** Examples

**ACTIVITY:**

Divide the following:-

1. 1516 by 5 =
2. 2425 by 3 =
3. 1212 by 5 =
4. 135 by 2 =
5. 215 by 4 =
6. 1212 by 7 =

Example : Divide 38148 by 5.

07629

5

√3 8 1 4 8

1 x 3 = 0

3 8

2 x 4 = 0 8

3 8

7 x 5 = 3 5

31

6 x 5 = 3 0

1 4

2 x 5 = 1 0

4 8

9 x 5 = 4 5 3

∴ 38148 ÷ 5 = 7629 rem 3

**LESSON :36**

**SUB-TOPIC : DIVISION BY 10**

Example:

(i) 650 ÷ 10 (ii) 420 ÷ 10

=  = 

∴650 ÷ 10 = 65. ∴420 ÷ 10 = 42.

**ACTIVITY :**

(v) 640 ÷ 10 =

(vi) 280 ÷ 10 =

(vii) 480 ÷ 10 =

(viii) 560 ÷ 10 =

(i) 200 ÷ 10 =

(ii) 370 ÷ 10 =

(iii) 810 ÷ 10 =

(iv) 340 ÷ 10 =

**REMARKS**

**LESSON 37**

**SUB-TOPIC :MIXED OPERATIONS**

**Examples: Workout 6+2-3**

**( 6+2 ) -3**

**8-3 = 5**

**Simplify : 9+4 – 2**

**( 9+4 ) – 2**

**13 – 2**

**11**

**ACTIVITY:**

**Work out the following mixed operations**

**a) 7+2-4 = c) 2 x 3 +5 =**

**b) 9-2+4 = d) 13 + 7 – 10 =**

Ref: MK Primary Mathematics

**LESSON 38**

**TOPIC : NUMBER PATTERNS AND SEQUENCES**

**SUB-TOPIC : TYPES OF NUMBERS**

**CONTENT : Even and odd numbers**

Even numbers if divided by two give us 0 (zero) as a remainder.

Examples: 0, 2, 4, 6, 8

Note: Any number ending with 0, 2, 4, 6, 8 is an even number.

Odd numbers are numbers if divided by two leave us with 1 as a remainder.

Example 1, 3, 5, 7, 9

**Note:** All numbers that have their last digit as 1, 3, 7, 9 are odd numbers.

**ACTIVITY**: New MK Primary Mathematics book four page 59.

**LESSON 39**

**SUB TOPIC**: More about Even and odd numbers.

* + - Counting even and odd numbers in a given set of instruction.

**Examples:**

(i) How many even numbers are there between 10 and 20?

Even numbers between 10 and 20 = { 12, 14, 16, 18}

∴ Even numbers between 10 and 20 are 4.

(ii) How many odd numbers are there between 0 - 10

= { 1, 3, 5, 7, 9}

There are 5 odd numbers.

ACTIVITY: Exercise 4c and 4d page 60 New MK Primary Mathematics book 4.

**LESSON 40**

**SUBTOPIC** : **More about even numbers.**

**Finding the sum, difference and product of even numbers.**

**Examples:**

1. What is the sum of the first 4 even numbers.

First 4 even numbers { 0, 2, 4, 6}

Sum = 0 + 2 + 4 + 6

Sum = 12

2. What is the difference between the second and fourth even numbers?

= {0, 2nd , 4, 6th}

Difference = 6 - 2

Difference = 4

3. What is the product of the first and fifth even numbers?

5st

1st

{0, 2, 4, 6, 8}

Product = 0 x 8 = 0

**ACTIVITY:** Mk Primary Mathematics book 4 page 60 Exercise 4c

**LESSON 41**

**SUBTOPIC**: **More about odd numbers.**

**Finding the sum, difference and product of odd numbers**

**Examples:**

(i) List down all odd numbers less than 10.

{1, 3, 7}

(ii) What is the sum of odd numbers less than 8

{1, 3, 7}

= 1 + 3 + 7

7

(iii) What is the product of the 3rd and 4th odd number?

4th

3rd

Odd numbers ={1, 3, 5, 7, 9, 11, 13, 15}

Product = 5 x 7

= 35

**ACTIVITY:** Exercise 4d. MK primary mathematics book 4 New edition

**LESSON 42**

**SUBTOPIC**: **Counting and whole numbers**

Definition: Counting numbers are numbers we use to count. They begin with one.

Examples:

1, 2, 3, 4, 5, 6, 7, 8, 9

**Whole numbers**

Write the missing numbers

0, 1, 2, 3, 4, 5, \_\_\_, \_\_\_, \_\_\_

These are whole numbers. They begin with Zero.

= 0, 1, 2, 3, 4, 4, 5, 6, 7,8,9

**ACTIVITY:** Exercise 4e New MK Primary Mathematics book four page 62

**LESSON 43**

**TOPIC: NUMBER PATTERNS AND SEQUENCE**

**SUBTOPIC**: **Number sequence by Adding.**

**CONTENT: Example**

(a) (1, 3, 5, 7, 9, \_\_\_, \_\_\_)

(b) (1, 2, 4, 5, 7, 8, \_\_\_\_)

Add 1 then add 2

Begin with

1 + 1 = 2

2 + 2 = 4

4 + 1 = 5

5 + 2 = 7

7 + 1 = 8

8 + 2 = 10

The missing number is 10

Keep adding 2

1 + 2 = 3

3 + 2 = 5

5 + 2 = 7

7 + 2 = 9

9+ 2 = 11

11 + 2 = 13

The missing numbers are 11 and 13

**NOTE:** Every sequence has its own pattern

ACTIVITY: 4F page 63 Mk Primary Mathematics book four (New Edition).

**LESSON 44**

**SUB TOPIC: NUMBER SEQUENCE**

**CONTENT:** Number sequence by subtracting

**Examples:**

(i) 8, 6, 4, 2 (ii) 20, 18 15, 13,10, 8, 5

-2 -2 -2 -2 -3 -2 -3 -2 -3

**ACTIVITY:**  Exercise 4e New MK Primary Mathematics book four page 62

**SUB TOPIC: MULTIPLES**

A multiple is a product of a given number and another whole greater than zero e.g.

4 x 2 = 8, and 8 is a multiple of 4.

(i) List multiples of 4 (ii) List multiples of 5

1 x 4 = 4 1 x 5 = 5

2 x 4 = 8 2 x 5 = 10

3 x 4 = 12 3 x 5 = 15

4 x 4 = 16 4 x 5 = 20

5 x 4 = 20 5 x 5 = 25

6 x 4 = 24 6 x 5 = 30

{4, 8, 12, 20, 24, ……….} 5, 10, 15, 20, 25, 30, …..}

**ACTIVITY:** Exercise 4g page 64 Mk book four New Edition.

**LESSON 46**

**SUB TOPIC: COMMON MULTIPLES AND LCM**

**CONTENT**

Examples

1. Find the first common multiples of 2 and 4

M2 = {2, 4, 6, 8, 10, 12, 14, 16, 18,…}

M4 = { 4, 8, 12, 16, 20, 24..….}

Common multiples = { 4, 8, 12, 16}

2. Find the L.C.M of 4 and 5

M4 = {4, 8, 12, 16, 20, 24, 28}

M5 = {5, 10, 15, 20, 25, 30, …..}

Common multiples = { 20}’

∴ L.C.M is 20

**LESSON 48**

**SUBTOPIC:** Multiplying by 10, 100, 1000.

**CONTENT:**In this case, we simply add the number of zero to the number.

Examples:

(i) 6 x 10 = 60

(ii) 7 x 100 = 700

1. 8 x 1000 = 8000
2. 38 x 100 = 3800

**ACTIVITY:** Exercise 4n on page 69 New Edition MK primary Mathematics book four.

**LESSON 49**

**SUBTOPIC:** Multiplying by multiples of 10

**CONTENT:**

Example 1. Example (ii)

(i) What is 7 x 30? What is 50 x 30?

7 x 30 = ? 50 x 30 = 5 x 10 x 3 x 10

30 = 3 x 10 = 5 x 3 x 10 x 10

So 7 x 30 = 7 x 3 x 10 = 15 x 100

= 21 x 10 = 1500

= 210

ACTIVITY: Exercise 4(o) page 70 New MK book 4

**SUB TOPIC** : **LISTING FACTORS.**

**CONTENT**: Definition

Factors are given pairs of numbers you multiply together to get a multiple/product.

**Example**

1. Which two numbers do we multiply to get 12?

**Note**: 1 is the first factor of every number and it’s a factor of itself.

F12 = 1 x 12 = 12

2 x 6 = 12

3 x 4 = 12

F12 = {1, 2, 3, 4, 6, 12}

1. List down all the factors of 16

F16 = 1 x 6 = 16

2 x 8 = 16

4 x 4 = 16

∴ F16 = {1, 2, 4, 8, 16}

ACTIVITY: Exercise 5s page 73 MK book 4 (New Edition)

**LESSON 53**

SUBTOPIC : COMMON FACTORS AND G.C.F / H.C.F

**CONTENT: COMMON FACTORS**

**Examples.**

(a) List down common factors of 4 and 6

F4 { 1, 2, 4}

F6 { 1, 2, 3, 6}

Common factors = { 1, 2}

(b) Find the Greatest Common Factors of 6 and 8

F6= { 1, 2, 3 ,6}

F8 ={ 1, 2, 4, 8}

Common factors = {1, 2,}

G.C.F of 6 and 8 is {2}

**ACTIVITY :**

1. List down common factors of

* 8 and 10
* 20 and 10
* 9 and 15

2. Find the G.C.F of

* 15 and 20
* 4 and 8
* 16 and 12

REMARKS

**LESSON 50**

**SUB TOPIC:** Dividing by multiples of 10

**CONTENT:** We divide by cancelling

**Examples:**

(ii) Share 2100 mangoes among 70 children

2100 ÷ 70 =  = 30

Divide 6000 by 30

= 200.

**ACTIVITY:** Exercise 4q page 71 MK primary mathematics book 4 (New Edition)

**END**