

GREENHILL ACADEMY

P.3 SECOND TERM LESSON NOTES

FOR

MATHEMATICS

TOPIC BREAKDOWN

THEME: SEVEN, MANAGING RESOURCES IN OUR ENVIRONMENT

Fractions

- Definition
- Names and parts of fractions
- Types of fractions
 - a) Proper
 - b) Improper
 - c) Mixed fractions

Writing fractions in words and vice versa.

- Finding the shaded and un-shaded fractions.
- Equivalent fractions
- Addition of fractions
- Subtraction of fractions
- Multiplication of fractions

THEME: EIGHT; KEEPING PEACE IN OUR SUB-COUNTRY / DIVISION

Measures

- Time
- Months, weeks and days
- Telling time by hours, half an hour, a quarter past and quarter to.
- Minutes past and to.
- Changing hours to minutes and vice versa.
- Adding hours and minutes
- Changing days to weeks and vice versa.
- Adding days and weeks.
- Subtracting days and weeks.
- Duration.

THEME NINE; CULTURE AND GENDER

Graphs

- Pictographs – Using pictures to show information.



Stands for 10 books

1 book stands for 10 books.

- Bar graphs / column
- Circle or pie chart.
- Recording information and making tallies.

THEME TEN; OUR HEALTH

Measures

Money

- Background
- Conversion of units
- Addition of money
- Word sums
- Subtraction of money
- Multiplication of money
- Division of money
- Shopping

THEME SEVEN; MANAGING RESOURCES

Week 3

Lesson one and two

Fractions

A fraction is a part of a whole.

The whole is always cut or divided into equal parts.

Names and parts of a fraction.

- Numerator- top number
- Denominator- bottom number.
- A whole number.

Activity

Ref:

- 1. Primary MTC Bk 3.**
- 2. Primary School Math Bk 3.**

Types of fractions

Proper fractions: - These are fractions that have their top number smaller than the bottom number.

e.g. $\frac{1}{2}, \frac{1}{3}, \frac{3}{5}, \frac{63}{89}$

Improper fractions

These are fractions that have top number bigger than the bottom number.

e.g.

$\frac{9}{5}, \frac{12}{7}, \frac{15}{2}$

Mixed fractions

These are fractions that have both whole numbers and fractions.

e.g.

$2\frac{1}{4}, 3\frac{2}{5}, 4\frac{1}{3}$

Activity

- Ref:**
- 1. Mk Math book 4 page.**
 - 2. National Primary School Curriculum for Uganda.**

Lesson three

Writing fractions in words

$\frac{1}{2}$ - A half

$\frac{1}{5}$ - One fifth or a fifth

Writing word fractions in figures

1) Three seventh = $\frac{3}{7}$

2) Four ninth = $\frac{4}{9}$

Activity

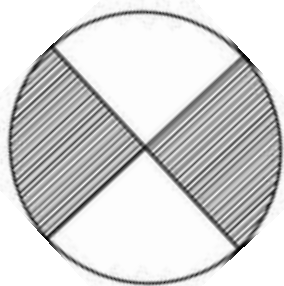
Ref

Mk math book three pages 94 – 96

Primary School Mathematics Book 3 page 99 - 100

Lesson four and five

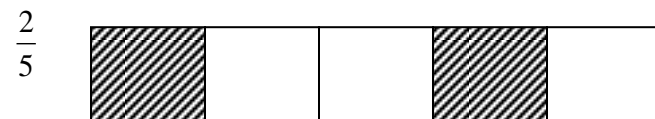
Shaded and un-shaded fractions



2 of the 4 parts shaded $\frac{2}{4}$

2 of the 4 parts un-shaded $\frac{2}{4}$

Drawing and shading given fractions



Activity

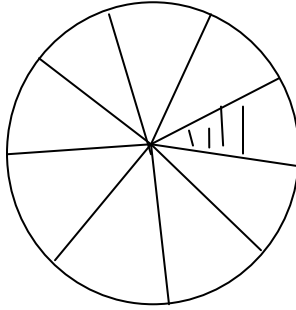
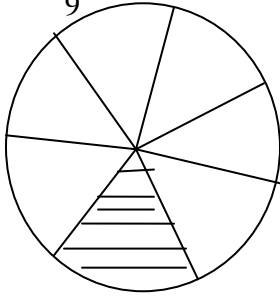
Ref:

1. Understanding MTC Bk 3 pg 46 – 49.
2. MK Primary Mathematics 2000 Bk 3 page 97 – 98.

Lesson six and seven

Comparing fractions

$\frac{1}{7}$ and $\frac{1}{9}$



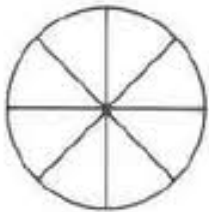
$\frac{1}{7}$

Is greater than

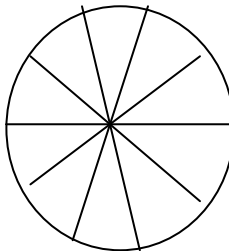
$\frac{1}{9}$.

Which is smaller?

$\frac{1}{8}$



$\frac{1}{10}$



$\frac{1}{10}$ is smaller than an eighths ($\frac{1}{8}$)

Activity

Ref:

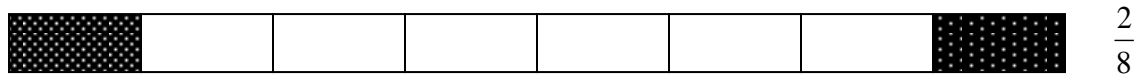
1. Understanding Mathematics Bk 3 pg 50-51.
2. Primary School Mathematics Bk 3 pag 99.

WEEK FOUR

Lesson one and two

Equivalent fractions

These are fractions which give the same number.



Activity

- Ref: 1. Understanding MTC Bk 3 pg 54.
2. Primary school MTC Bk 3 Page 101

Lesson three and four

Addition of fractions

$$\frac{1}{2} + \frac{1}{2} = \frac{1+1}{2} = \frac{2}{2} = 1$$

Activity

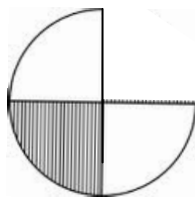
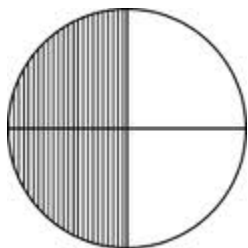
Ref:

1. Understanding MTC Bk 3 pg 52.
2. Mk Bk 3 pg 101 – 104

Lesson five and six

Subtraction of fractions

$$1. \quad \frac{3}{4} - \frac{1}{4} = \frac{3-1}{4} = \frac{2}{4}$$



$$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$$

2. $1 - \frac{3}{5}$

$$\frac{5}{5} - \frac{3}{5} = \frac{5-3}{5} = \frac{2}{5}$$

Activity

- Ref:**
1. Understanding MTC Bk 3 pg 53.
 2. Primary Mathematics 2000 Bk 3 pg 105 – 108.

Lesson seven and eight

Addition of fractions with different denominators.

$$\frac{1}{2} + \frac{1}{4} \quad \text{Rename } \frac{1}{2}$$

$$\frac{1}{2} \times \frac{2}{2} = \frac{2}{4}$$

$$\frac{2}{4} + \frac{1}{4} = \frac{2+1}{4} = \frac{3}{4}$$

Activity

- Ref:**
- Primary School Maths Bk 3 pg 102 – 104
- Fountain Primary Mathematics page 68

WEEK FIVE

Lesson one and two

Subtraction of fractions with different denominators.

$$\frac{1}{2} - \frac{1}{4}$$

$$\text{Rename } \frac{1}{2}$$

$$\frac{1}{2} \times \frac{2}{2} = \frac{2}{4}$$

$$\frac{2}{4} - \frac{1}{4} = \frac{2-1}{4} = \frac{1}{4}$$

Activity

Ref:

Primary School Maths Bk 3 pg 102 – 104

Lesson three and four

Multiplication of fractions

$$1. \quad \frac{2}{3} \times \frac{1}{3} = \frac{2}{9}$$

$$2. \quad \frac{3}{5} \times \frac{2}{3} = \frac{6}{15}$$

Activity

Ref:

Understanding Maths bk 4 pg

Mk prim. Maths 2000 bk 4 page

Lesson five and six

Multiplication of fractions by whole numbers.

$$\frac{3}{6} \times 4 = \frac{12}{6} = 2$$

Activity

Ref:

Primary School Mathematics Book 3 Page 105

Mk prim. Maths 2000 bk 4 pg

Lesson seven and eight

Topical questions

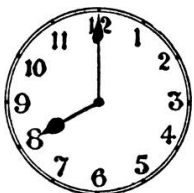
THEME EIGHT: KEEPING PEACE IN OUR SUB-COUNTY

WEEK SIX

Lesson one and two

Telling time

By hours



It is eight o'clock or 8:00.

By a half past



It is a half past eight o'clock or 8:30.

Activity

Ref:

1. Understanding MTC Bk 3 page 74 -75
2. Primary MTC Bk 3 pg 127.

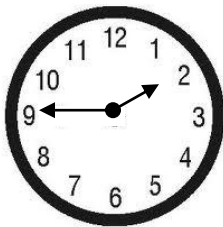
Lesson three and four

A quarter past (15 minutes past)



A quarter past ten o'clock or 10:15.

A quarter to (15 minutes to)



A quarter to two o'clock or 2:45.

Activity

Ref:

1. Understanding MTC Bk 3 pg 74-75.
2. Primary Mathematics 2000 Bk 3 pg 131 – 135.

Lesson five and six

Changing hours to minutes

Change 4 hours to minutes

$$1 \text{ hr} = 60 \text{ minutes}$$

$$4 \text{ hours} = (4 \times 60) \text{ minutes} \\ 240 \text{ minutes}$$

Activity

Ref:

- 1. JKF Primary Mathematics Bk 3**
- 2. Primary Mathematics Bk 4 pg 162 – 164.**

Lesson seven and eight

Changing minutes into hours

Change 180 minutes to hours

$$1 \text{ hour} = 60 \text{ minutes}$$

$$? = 180 \div 60 \\ 18 \div 6 \\ \underline{3 \text{ hrs}}$$

Activity

Ref:

- 1. JKF Primary Mathematics Bk 3**
- 2. Primary Mathematics Bk 4 pg 162 – 164.**

WEEK SEVEN

Lesson one and two

Addition of time (hours and minutes)

Hrs	Mins	Hrs	Mins
3	24	1	30
+4	32	+3	35
<u>7</u>	<u>56</u>	<u>5</u>	<u>06</u>

Activity

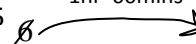
Ref: Understanding maths bk 3 pg 76

MK Prim. Maths 2000 bk 4 pg 168

Lesson three and four

Subtraction of time (hours and minutes)

Hrs	Mins
3	20
-1	10
<hr/>	<hr/>
2	10

Hrs	Mins	
5	30	60
5		
-4	45	+ 30
<hr/>	<hr/>	
1	45	90
		<hr/>
		-45
		<hr/>
		45

Activity

- Ref: 1. JKF Primary Mathematics Bk 3 pg
2. Primary Mathematics 2000 Bk 4 pg 168.

Lesson five and six

Days of the week

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Months of the year

January

February

March

April

May

June

July

August

September

October

November

December

Changing weeks to days

2 weeks to days

1 wk = 7days

2 wks = 2 x 7
14 days

Activity

Ref:

Understanding Maths bk 3 pg 69 - 70

MK pri. Maths 2000 bk 4 pg

Lesson seven and eight

Changing days to weeks.

35 days to weeks

1 wk = 7days

? = (35 ÷ 7) days
= 5 weeks

Activity

Ref:

Understanding Maths bk 3 pg

MK Pri. Maths 2000 bk 4 pg

WEEK EIGHT

Lesson one and two

Addition of weeks and days

Weeks	Day
2	3
+3	2
<hr/>	<hr/>
5	5

Weeks	Day
4	4
+1	3
<hr/>	<hr/>
6	0

7)	7	1
		-7	
		0	

Subtraction of weeks and days

Weeks	Days
5	4
<u>-3</u>	<u>1</u>
<u>2</u>	<u>3</u>

Weeks	Days	
4	$\xrightarrow{1 \text{ wk} = 7 \text{ days}}$ 1	$7 + 1 = 8$
<u>-1</u>	<u>6</u>	<u>-6</u>
<u>3</u>	<u>2</u>	<u>2</u>

Activity

- Ref: 1. JKF Primary Maths Bk 3 pg
2. Primary Maths 2000 Bk 4 pg 180 – 182.

Lesson three and four

Adding and subtracting years and months

Years	Months
4	8
<u>+ 2</u>	<u>4</u>
<u>7</u>	<u>0</u>

- Ref: 1. JKF Primary Maths Bk 3 pg
2. Primary Maths 2000 Bk 4 pg 180 – 182.

Lesson five and six

Duration

How long an activity takes or the time taken to do an activity.

A race started at 9:30, and ended at 9:32. How many minutes did the race take?

Hrs	Mins
9	32
<u>-9</u>	<u>30</u>
<u>0</u>	<u>02</u>

The race took 2 minutes.

Ref: 1. Understanding MTC Bk 3 page 76.

Lesson seven and eight

Topical questions

WEEK NINE

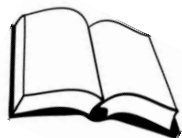
THEME NINE; CULTURE AND GENDER

Lesson one and two

Graphs

Pictographs

Using pictures to show information.



Stands for 10 books.

1 book stands for 10 books.

How many books did Moses get?

Moses got (3×10) books = 30 books.

OR $10 + 10 + 10 = 30$ books

Activity

Ref: 1. Understanding Mathematics Bk 3 pg 56 – 57.

2. Primary Mathematics 2000 pg 110 – 112 bk 3.

Lesson three and four

Column graphs

Information can also be represented in block form. We count spaces upwards to get the answer.

Mugerwa scored the following marks at the end of term.

10	ENG (2)	REL (7)	MTC (3)	ART (8)	MUSIC (1)
9					
8					
7					
6					
5					
4					
3					
2					

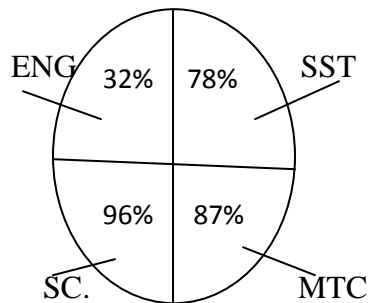
Activity

- Ref: 1. Understanding MTC Bk 3 pg 58 – 59.
2. Primary Mathematics 2000 pg 113 – 115

Lesson five and six

Circle graph or pie chart

The pie chart below shows the marks Suzan scored in her mid-term exams.



1. Which subject did she perform best?
2. Which was her worst performance?

Activity

Ref:

Primary Mathematics for Uganda Bk 4 pg 58-59

MK Prim. Math Bk 4 pg 113-115.

Lesson seven and eight

Recording information

Teacher will give learners information which they will record and tally.

WEEK TEN

THEME TEN: OUR HEALTH

Lesson one and two

Measures

MONEY

Background of money and the meaning.

Things that were used long ago e.g. cowrie shells, rupees.

Types of money used in Uganda today coins and notes.

Features

500 shilling coin

100 shilling coin

200 shilling coin

500 shilling coin

1000 shilling note

2000 shilling note

5000 shilling note

10,000 shilling note

20,000 shilling note

50,000 shilling note

Activity

Write down two features found on each coin and notes used in Uganda.

Lesson three and four

Conversion of units

Changing money from bigger denomination to smaller denomination

e.g

1. How many 100 shilling coins are in 500 shillings?

$$\begin{array}{r} 5 \\ 100 \overline{) 500} \\ 5 \times 100 = \underline{500} \\ 000 \end{array}$$

There are 5 one hundred shilling coins in 500 /=-.

How much money do you get from 6 coins of 200/=

$$1 \text{ coin} = 200/=$$

$$6 \text{ coins} = 200$$

$$\begin{array}{r} \times 6 \\ \hline 1200/= \end{array}$$

How many five hundred shilling coin can be got from 2000/=

$$2000 \div 500$$

$$20 \div 5$$

$$\underline{4}$$

There are four 500 coins in 2000/=

Activity

Ref

Mk Maths book 4 page

Fountain Primary Mathematics Book 4 page 130 -131

Lesson five and six

Addition of money

$$\text{Sh. } 100 + \text{sh } 300$$

$$\begin{array}{r} \text{Sh } 100 \\ + \text{sh } 300 \\ \hline \text{Sh } 400 \end{array} \quad \begin{array}{l} \text{or} \\ 100 \text{ shillings} \\ + 300 \text{ shillings} \\ \hline 400 \text{ shillings} \end{array}$$

Word sums

One thousand shillings plus one thousand three hundred seventy

$$\begin{array}{r} \text{Sh } 1000 \\ + \text{sh } 1370 \\ \hline \text{Sh } 2370 \end{array} \quad \begin{array}{l} \text{or} \\ 1000 \text{ shillings} \\ + 1370 \text{ shillings} \\ \hline 2370 \text{ shillings} \end{array}$$

Activity

Mk Math book 3 page 177 – 178

Fountain Primary Mathematics Book 4 page 132 -13

Lesson seven and eight

Subtraction of money

$$\text{Sh. } 880 - \text{sh. } 490$$

Sh. 880	or	880 shillings
- <u>Sh. 490</u>		- <u>490 shillings</u>
<u>Sh. 390</u>		<u>390 shillings</u>

Word sums

How much change will she get from one thousand shillings if one spent three hundred seventy shillings?

$$\begin{array}{r} 1000 \\ - \quad 370 \\ \hline 230 \end{array}$$

Activity

Mk Maths book 3 page 179 – 180

Fountain Primary Mathematics Book 4 page 134 -135

WEEK ELEVEN

Lesson one and two

Multiplication of money

One book costs sh. 100. How much money will Angella pay for two books?

$$\begin{array}{rcl} 1 \text{ book cost sh. } 100 & & \\ 2 \text{ books will cost } & \text{sh. } 100 & \\ & \times 2 & \\ & \hline & 200 & \end{array}$$

An orange costs shs. 500. How much money will 3 oranges cost?

$$\begin{array}{rcl} 1 \text{ orange costs shs } 500 & & \\ 3 \text{ oranges will cost sh. } 500 \times 3 & & \\ & \text{Sh. } 1500 & \end{array}$$

Activity

Mk Maths book 3 page 184 – 186

Fountain Primary Mathematics Book 4 page 135 -136

Lesson three and four

Division of money

Mr. Kasule had sh. 800. He shared it equally between his two pupils. How much did each pupil get?

2 children shared 800/=

1 child gets $800 \div 2$

$$\begin{array}{r} 400 \\ 2 \overline{) 800} \\ \underline{4 \times 2 = 8} \\ 00 \\ \underline{0 \times 2 = 0} \\ 00 \\ \underline{0 \times 2 = 0} \\ 0 \end{array}$$

Each child get 400/=

Activity

Mk Maths book 3 page 187

Fountain Primary Mathematics Book 4 page 137

Lesson five and six

SHOPPING

Shopping list

Sugar	1200/=	flour	800/=
Rice	800/=	Bread	700/=
Soap	700/=	Salt	300/=
Milk	500/=	A pkt of leaves	500/=

How much money will Mrs. Iga pay if she buys a pkt of milk, a pkt of tea leaves and 1kg of sugar.

A pkt of milk costs	sh. 600
A pkt of tea leaves costs	sh. 500
1 kg of sugar costs	<u>+ sh. 1200</u>
She paid	<u>sh. 2200</u>

Kapere has sh. 1800. He buys a kg of sugar and a pkt of salt from Mr. Dramadri's shop.

a) How much money will he pay for;

1kg sugar costs shs 1200

1 kg of salt costs sh +300

He will pay sh 1500

b) How much does he remain with?

He had sh. 1800

He paid - sh 1500

He remains with sh. 300

Namukisa buys 4 oranges and 2 pineapples. How much money will she pay?

4 oranges cost $4 \times 250 = \text{sh } 1000$

2 pineapples cost sh $2 \times 400 = \text{+sh } 800$

Namukisa paid sh 1800

Activity

- Ref:
1. Primary school MTC Bk 3 page 62 -63
 2. MK Primary MTC Bk 3 page 184
 3. Primary Mathematics for Uganda Bk 3
 4. JKF Pr Maths BK 3.
 5. Understanding MTC bk 3 67 - 68