



H O P E H A V E N  
S C H O O L

# **PRIMARY 4 MATH**

## **TERM TWO WORKBOOK**

Student Name:

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Academic Year: \_\_\_\_\_

# UNIT 4: FRACTIONS OF THE SAME DENOMINATORS

## Week 1

### LESSON 1: Introduction to the meaning of fractions

Define the following terms.

1. Fraction

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2. Denominator

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3. Numerator

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4. Fraction bar

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5. Mixed number

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6. Proper fraction

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7. Improper fraction

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## LESSON 2: Reading and writing fractions

Write the following fractions in figures.

1. Two tenths = \_\_\_\_\_

2. Five ninths = \_\_\_\_\_

3. Four sixths = \_\_\_\_\_

4. Eleven hundredths = \_\_\_\_\_

5. Six elevenths = \_\_\_\_\_

6. A fifth = \_\_\_\_\_

7. A quarter = \_\_\_\_\_

8. Two sevenths = \_\_\_\_\_

9. Nine fourths = \_\_\_\_\_

10. Eight fifteenths = \_\_\_\_\_

### LESSON 3: Types of fraction: same, different and mixed denominator

Name the fractions.

1.  $\frac{2}{3}$  \_\_\_\_\_

2.  $\frac{6}{4}$  \_\_\_\_\_

3.  $3\frac{5}{7}$  \_\_\_\_\_

## LESSON 4: Comparing fractions with the same denominator, including mixed fractions

Compare the following fractions using  $<$ ,  $>$  or  $=$

1.  $2\frac{3}{4}$  \_\_\_\_\_  $4\frac{1}{2}$

2.  $\frac{5}{6}$  \_\_\_\_\_  $\frac{4}{6}$

3.  $\frac{7}{8}$  \_\_\_\_\_  $4\frac{1}{2}$

4.  $2\frac{3}{4}$  \_\_\_\_\_  $4\frac{1}{2}$

5.  $2\frac{6}{9}$  \_\_\_\_\_  $3\frac{6}{9}$

6.  $\frac{8}{10}$  \_\_\_\_\_  $\frac{7}{10}$

7.  $4\frac{10}{12}$  \_\_\_\_\_  $3\frac{8}{12}$

8.  $5\frac{12}{24}$  \_\_\_\_\_  $\frac{8}{24}$

## LESSON 5: Addition of fractions with the same denominator

1.  $\frac{4}{7} + \frac{2}{7} =$  \_\_\_\_\_

2.  $\frac{3}{6} + \frac{2}{6} =$  \_\_\_\_\_

3.  $\frac{9}{12} + \frac{1}{12} =$  \_\_\_\_\_

4.  $\frac{45}{90} + \frac{30}{90} =$  \_\_\_\_\_

5.  $\frac{6}{34} + \frac{23}{34} =$  \_\_\_\_\_

6.  $\frac{4}{10} + \frac{5}{10} =$  \_\_\_\_\_

7.  $\frac{24}{8} + \frac{6}{8} =$  \_\_\_\_\_

8.  $\frac{5}{9} + \frac{2}{9} =$  \_\_\_\_\_

9.  $\frac{56}{80} + \frac{20}{80} =$  \_\_\_\_\_

WEEK 2

## LESSON 1: Subtraction of fractions with the same denominator

1.  $\frac{4}{7} - \frac{2}{7} =$  \_\_\_\_\_

2.  $\frac{4}{7} - \frac{2}{7} =$  \_\_\_\_\_

3.  $\frac{6}{23} - \frac{4}{23} =$  \_\_\_\_\_

4.  $\frac{8}{17} - \frac{4}{17} =$  \_\_\_\_\_

5.  $\frac{5}{10} - \frac{3}{10} =$  \_\_\_\_\_

6.  $\frac{8}{20} - \frac{2}{20} =$  \_\_\_\_\_

7.  $\frac{3}{5} - \frac{1}{5} =$  \_\_\_\_\_

8.  $\frac{4}{6} - \frac{3}{6} =$  \_\_\_\_\_

9.  $\frac{8}{12} - \frac{4}{12} =$  \_\_\_\_\_

## LESSON 2: Problems involving addition and subtraction of fractions

1. What is the sum of  $\frac{4}{7}$  and  $\frac{2}{7}$  ?
  
2. Rukatamiza gave his children  $\frac{3}{12}$  of a cake. He gave  $\frac{7}{12}$  of the cake to his friends. How much cake did he give out?
  
3. A tailor used  $\frac{2}{5}$  m cloth to make a blouse. He used  $\frac{2}{5}$  m cloth to make a shirt. How many meters of cloth did he use?
  
4. A girl has  $\frac{3}{6}$  m of string and another  $\frac{1}{6}$  m of string. What length of string does she have?
  
5. On the first day, Jackline read  $\frac{7}{10}$  of a book. She read the remaining part of it on the second day. What fraction of the book did she read on the second day?



6. I bought  $\frac{7}{11}$  of a sack of maize. I give two elevenths of the sack of maize to the needy. What fraction of maize did I remain with?

7. Mike had  $\frac{3}{5}$  m piece of sugarcane. He gave  $\frac{1}{5}$  m of the cane to his friend. What length of sugarcane was he left with?

### LESSON 3 : Multiplication of fractions by whole numbers

1.  $\frac{2}{3} \times 4 =$  \_\_\_\_\_

2.  $\frac{6}{14} \times 6 =$  \_\_\_\_\_

3.  $\frac{6}{8} \times 3 =$  \_\_\_\_\_

4.  $\frac{4}{3} \times 6 =$  \_\_\_\_\_

5.  $\frac{8}{11} \times 4 =$  \_\_\_\_\_

6.  $\frac{3}{4} \times 5 =$  \_\_\_\_\_

7.  $\frac{10}{12} \times 2 =$  \_\_\_\_\_

8.  $\frac{7}{9} \times 6 =$  \_\_\_\_\_

9.  $\frac{5}{6} \times 3 =$  \_\_\_\_\_

#### LESSON 4: Multiplication of fractions by fractions

1.  $\frac{4}{7} \times \frac{2}{7} =$  \_\_\_\_\_

2.  $\frac{3}{6} \times \frac{2}{6} =$  \_\_\_\_\_

3.  $\frac{9}{12} \times \frac{1}{12} =$  \_\_\_\_\_

4.  $\frac{5}{9} \times \frac{3}{9} =$  \_\_\_\_\_

5.  $\frac{6}{3} \times \frac{2}{4} =$  \_\_\_\_\_

6.  $\frac{4}{10} \times \frac{5}{10} =$  \_\_\_\_\_

7.  $\frac{24}{8} \times \frac{6}{8} =$  \_\_\_\_\_

8.  $\frac{5}{9} \times \frac{2}{9} =$  \_\_\_\_\_

9.  $\frac{5}{8} \times \frac{2}{8} =$  \_\_\_\_\_

### LESSON 5: Division of fractions by whole numbers

1.  $\frac{1}{3} \div 3 =$  \_\_\_\_\_

2.  $\frac{4}{6} \div 4 =$  \_\_\_\_\_

3.  $\frac{1}{8} \div 2 =$  \_\_\_\_\_

4.  $\frac{2}{3} \div 2 =$  \_\_\_\_\_

5.  $\frac{5}{8} \div 4 =$  \_\_\_\_\_

6.  $\frac{4}{9} \div 3 =$  \_\_\_\_\_

7.  $\frac{2}{5} \div 2 =$  \_\_\_\_\_

8.  $\frac{3}{4} \div 3 =$  \_\_\_\_\_

9.  $\frac{4}{7} \div 6 =$  \_\_\_\_\_

**LESSON 6: Problems involving multiplication and division of fractions**

1. A mother has a cake. She decides to share it equally among her 5 children. What fraction does each child get?

2. In a class there are 30 students. Two thirds of these are girls. How many girls are in the class?
  
3. A soccer stadium has 20,000 spectators. Half of the spectators are wearing red jerseys. How many spectators are wearing red jerseys?
  
4. A plot of land in a certain town costs 100,000F. Peter bought one tenth of the plot. What amount of money did they pay for the plot?
  
5. In our school, a lesson lasts 40 minutes. We spend one eighth of the lesson revising the previous exercise. How long do we spend on revision per lesson?

## UNIT 5: DECIMAL NUMBERS

### LESSON 1: Introduction to the concept of decimal numbers

Object	Name of the shaded part	Written as decimal	Read as

	Five tenths	0.5	Zero point five
	_____	_____	Zero point seven
	Fifteen tenths	_____	_____
	_____	1.7	_____
	Six tenths	_____	_____

**EXERCISE 2: Write the following in words**

- a. 0.7 \_\_\_\_\_
- b. 0.08 \_\_\_\_\_
- c. 0.60 \_\_\_\_\_
- d. 1.34 \_\_\_\_\_
- e. 0.9 \_\_\_\_\_
- f. 0.50 \_\_\_\_\_
- g. 2.67 \_\_\_\_\_
- h. 0.06 \_\_\_\_\_
- i. 0.40 \_\_\_\_\_
- j. 0.57 \_\_\_\_\_

k. 0.04 \_\_\_\_\_

l. 0.99 \_\_\_\_\_

m.0.21 \_\_\_\_\_

**EXERCISE 3: Write the following in figures**

A. Three point two three \_\_\_\_\_

B. Zero point one two \_\_\_\_\_

C. Ten and six tenths \_\_\_\_\_

D. Twenty hundredths \_\_\_\_\_

E. Zero point nine three \_\_\_\_\_

F. Zero point three zero \_\_\_\_\_

G. Four tenths \_\_\_\_\_

**LESSON 2: Decimals on a number line**

Draw a number and show the following decimals.

a. 0.04 ; 0.07

b. 3.03 ; 3.05 ; 3.07

c. 2.00 ; 2.01 ; 2.05

d. 1.01 ; 1.03 ; 1.05

e. 0.8 ; 0.2 ; 1.0 ; 1.1 ; 0.1

f. 0.4 ; 0.6 ; 0.7 ; 0.5 ; 0.9

### LESSON 3: Place value of decimal numbers

Fill in the blank spaces on the table below.

Numbers	Tens	Ones	Decimal point	Tenths	Hundredths
0.88					



10.69					
1.57					
12.96					

Identify the place value of 4 in the following

a. 0.4 \_\_\_\_\_

b. 0.04 \_\_\_\_\_

c. 1.14 \_\_\_\_\_

d. 9.43 \_\_\_\_\_

e. 10.94 \_\_\_\_\_

Identify the digit in the hundredths place value below

a. 1.02 \_\_\_\_\_

b. 10.11 \_\_\_\_\_

c. 48.53 \_\_\_\_\_

d. 19.00 \_\_\_\_\_

e. 26.89 \_\_\_\_\_

Identify the digit in the tenths place value below.

a. 0.34 \_\_\_\_\_

b. 0.06 \_\_\_\_\_

c. 1.91 \_\_\_\_\_

d. 14.77 \_\_\_\_\_

e. 2.76 \_\_\_\_\_

### LESSON 4: Comparing decimal numbers

Use  $<$ ,  $>$  or  $=$  to complete the following.

a. 0.5 \_\_\_\_\_ 0.9

b. 0.3 \_\_\_\_\_ 0.4

c.  $1.0$  \_\_\_\_\_  $0.9$

d.  $0.3$  \_\_\_\_\_  $0.8$

e.  $0.4$  \_\_\_\_\_  $0.1$

f.  $0.8$  \_\_\_\_\_  $1.0$

g.  $0.9$  \_\_\_\_\_  $.04$

h.  $0.5$  \_\_\_\_\_  $0.7$

i.  $0.6$  \_\_\_\_\_  $0.5$

j.  $0.8$  \_\_\_\_\_  $0.6$

Use a number line to answer which is greater?

A.  $0.02$  \_\_\_\_\_  $0.09$

B.  $0.42$  \_\_\_\_\_  $0.24$

C.  $0.09$  \_\_\_\_\_  $0.90$

D.  $0.36$  \_\_\_\_\_  $0.63$

E.  $0.50$  \_\_\_\_\_  $0.5$

F.  $0.06$  \_\_\_\_\_  $0.16$

G.  $0.87$  \_\_\_\_\_  $0.78$

H.  $0.80$  \_\_\_\_\_  $0.08$

I.  $0.33$  \_\_\_\_\_  $0.03$

J.  $0.80$  \_\_\_\_\_  $0.8$

Arrange these from the smallest to the largest.

a.  $0.05 ; 0.55 ; 0.65 ; 0.45$

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b.  $0.75 ; 0.57 ; 0.76 ; 0.37$

---

c.  $0.63 ; 0.36 ; 0.33 ; 0.31$

---

d.  $0.88 ; 0.83 ; 0.08 ; 0.98$

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### LESSON 1: Addition of decimals

1.  $0.75 + 0.4 =$  \_\_\_\_\_

2.  $0.2 + 0.4 =$  \_\_\_\_\_

3.  $0.49 + 0.01 =$  \_\_\_\_\_

4.  $2.1 + 2.1 =$  \_\_\_\_\_

5.  $14 + 10.51 =$  \_\_\_\_\_

6.  $0.6 + 0.4 =$  \_\_\_\_\_

7.  $0.2 + 0.7 =$  \_\_\_\_\_

8.  $0.2 + 0.7 =$  \_\_\_\_\_

9.  $9.37 + 0.64 =$  \_\_\_\_\_

10.  $7.37 + 2.38 =$  \_\_\_\_\_

11.  $1.2 + 8.89 =$  \_\_\_\_\_

12.  $0.93 + 0.07 =$  \_\_\_\_\_

13.  $0.02 + 0.089 =$  \_\_\_\_\_

14.  $20.3 + 7.8 =$  \_\_\_\_\_

15.  $0.99 + 9.1 =$  \_\_\_\_\_

### LESSON 2: Subtraction of decimal number

1.  $0.24 - 0.14 =$  \_\_\_\_\_

2.  $0.50 - 0.06 =$  \_\_\_\_\_

3.  $0.33 - 0.27 =$  \_\_\_\_\_

4.  $0.68 - 0.29 =$  \_\_\_\_\_

5.  $0.41 - 0.29 =$  \_\_\_\_\_

6.  $0.41 - 0.08 =$  \_\_\_\_\_

7.  $0.65 - 0.44 =$  \_\_\_\_\_

8.  $0.75 - 0.57 =$  \_\_\_\_\_

9.  $4.09 - 2.71 =$  \_\_\_\_\_

10.  $8.65 - 2.68 =$  \_\_\_\_\_

11.  $21.41 - 11.73 =$  \_\_\_\_\_

12.  $10.25 - 6.58 =$  \_\_\_\_\_

13.  $2.44 - 0.11 =$  \_\_\_\_\_

14.  $45.25 - 20.79 =$  \_\_\_\_\_

15.  $17.30 - 13.98 =$  \_\_\_\_\_

### **LESSON 3: Addition and subtraction of decimal numbers**

1. Mrs. Sibó had 54.5 meters of cloth. She sold 39.65 meters of it. How much cloth remained?

2. The table below shows points scored by 2 pupils in table tennis. Use it to answer questions that follow.

Players	1 <sup>st</sup> round	2 <sup>nd</sup> round	3 <sup>rd</sup> round	Total
Nebye	18.6	17.4	20.75	_____
Barbra	19.54	_____	15.5	60.42

- What was the total score for Nebye in the three rounds?
- Find Barbra's score in the 2<sup>nd</sup> round.
- Calculate the total score for both pupils in the second round.
- Find the difference in Nebye's and Barbra's score in the 3<sup>rd</sup> round

3. Ndahiro collected 58.35 liters of milk in the morning. He sold 43.7 liters and left the rest for his family. How much milk was left?

## UNIT 6: LENGTH MEASUREMENT

### LESSON 1: Concept of distance/length

- Stand in a line as a class. Estimate the distance for the line made by your class.



2. Estimate your height.
  
3. Estimate the height of your teacher.
  
4. Estimate the distance from your class to the office.
  
5. Estimate the length of your table.
  
6. Use a meter ruler to measure the following
  - a. The length of the whiteboard.
  - b. The length of your classroom floor.
  - c. The distance round your classroom floor
  - d. The width of your playground.
  - e. The width of your classroom window.

## **LESSON 2: Instrument for measuring length**

Name instruments used to measure length/distance.

1. \_\_\_\_\_
2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

### **LESSON 3: Standard unit of measuring length**

1. Write down all units bigger than meter

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

2. Write down all the units smaller than meter

a. \_\_\_\_\_

b. \_\_\_\_\_

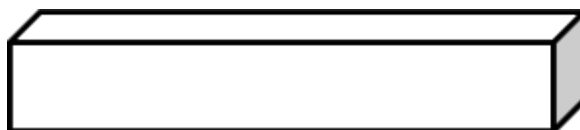
c. \_\_\_\_\_

3. Name the standard unit for measuring length.

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### **LESSON 4: Measuring the length and perimeter of various objects in different units**

Measure the length of the following objects.

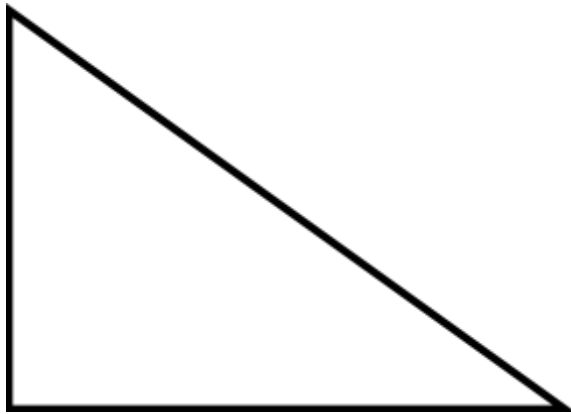


1.

2.



3.



### LESSON 1: Non-standard units

1. Write down all the non-standard units smaller than meter

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

2. Write down all the units smaller than decameter

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

3. Name the standard unit for measuring length.

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## **LESSON 2: Estimate different small units of length**

Use a centimeter ruler to measure and record.

a. Length of your exercise book

b. Length of your pencil

c. Length of your bench

d. Length of your mathematical textbook

e. Length of your hand

f. Length of your foot

g. Length of teacher's desk

**LESSON 3: Reading and writing measurements of length (km, dam, m, cm, and mm)**

Write the following in symbols.

1. Eighty kilometers = \_\_\_\_\_

2. Fifteen millimeters = \_\_\_\_\_

3. Ninety centimeters = \_\_\_\_\_

4. 50 decameters = \_\_\_\_\_

5. 20 decameters = \_\_\_\_\_

6. Fifty six meters = \_\_\_\_\_

7. 10 centimeters = \_\_\_\_\_

8. Sixty five kilometers = \_\_\_\_\_

9. Forty decameters = \_\_\_\_\_

**LESSON 4: Conversion of length measurements with application problems  
in meaningful contexts**

Convert the following units into decameters.

1. 4km \_\_\_\_\_

2. 236m \_\_\_\_\_

3. 43900m \_\_\_\_\_

4. 5000cm \_\_\_\_\_

5. A car travelled 200 kilometers in the morning. How many decameters did it cover?

6. Primary four pupils walked for 2000 meters. How many decameters did they cover?

7. An athlete ran 10,000m. What is her distance in decameters?

8. I walked two kilometers to school. How many meters in this?

9. Our school compound is 1,000,000 mm. how many meters is the school compound?

**LESSON 5: Addition and subtraction of length measurement and decimal numbers up to 2 decimal places in meaningful context**

1.  $45\text{m} + 20\text{cm} + 2\text{mm} = \underline{\hspace{2cm}} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

2.  $58\text{m } 36\text{cm } 8\text{mm} + 96\text{m } 28\text{cm } 1\text{mm} = \underline{\hspace{2cm}} \text{ cm } \underline{\hspace{2cm}} \text{ m } \underline{\hspace{2cm}} \text{ mm}$

3.  $94\text{m } 16\text{cm} + 28\text{m } 34\text{cm} = \underline{\hspace{2cm}} \text{ m}$



4.  $121.65 \text{ m} + 58.40 \text{ m} = \underline{\hspace{2cm}} \text{ m}$
5.  $112.20 \text{ m} + 48.75 \text{ m} = \underline{\hspace{2cm}} \text{ m}$
6.  $400 \text{ m } 24 \text{ cm} + 209 \text{ m } 79 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$
7.  $80.7 \text{ km} - 20.8 \text{ km} = \underline{\hspace{2cm}} \text{ km}$
8.  $33.5 \text{ dam} + 133.5 \text{ m} = \underline{\hspace{2cm}} \text{ dam}$
9.  $99.86 \text{ m} - 76.54 \text{ m} = \underline{\hspace{2cm}} \text{ m}$
10.  $42.28 \text{ dam} - 317.7 \text{ m} = \underline{\hspace{2cm}} \text{ dam}$

### **LESSON 6: The perimeter of a 2D shape**

1. Calculate the perimeter of the square garden whose side is 40m.
2. Find the distance round the triangle whose sides are 0.6dam ; 1 dam and 0.8 dam.

3. Workout the perimeter of a rectangle whose length is 100 m and with 20 dam.
4. What is the perimeter of a rhombus whose side is 8hm?
5. Find the perimeter of a parallelogram whose sides are 5cm and 7cm.
6. Calculate the perimeter of a square whose side is 15 dam.
7. Workout the perimeter of a square playground whose side is 120 m.

**LESSON 7: Solving real life problems involving perimeter and length measurement**

1. A bench is 2.5 metres long. Convert its length to cm.
2. The height of my friend is 1.40 m. Write the height as cm.

3. Convert 4km to dam.
4. Gahima rode 15km to the market. What distance in meters did he cover?
5. A field is 80m long by 40m wide. What is the distance round it?
6. An eagle flew 3km from the ground. Later it ascended another 50dam. What height was the eagle flying in meters?
7. The distance between 2 electric poles is 30.3 meters. What is the distance in dam?

## **UNIT 7: CAPACITY MEASUREMENT**

### **LESSON 1: Introductory activity on the concept of capacity**

Which one holds more water?

- a. Jug

- b. Cup
- c. Glass
- d. Bucket
- e. Basin
- f. Jerrican
- g. Drum

### LESSON 2: Units of capacity

Unit of capacity	Symbol
Hectoliter	

	Dal
Liter	
	DI
Centiliter	
Milliliter	

### LESSON 3: Measuring different capacities in liters

Measure the capacities of the following in liters.

1. Jug = \_\_\_\_\_

2. Cup = \_\_\_\_\_

3. Glass = \_\_\_\_\_

4. Bucket = \_\_\_\_\_

5. Basin = \_\_\_\_\_

6. Jerrican = \_\_\_\_\_

7. Drum = \_\_\_\_\_

#### **LESSON 4: Estimation of the capacity of different objects**

Estimate the capacity of the following containers. Which one is large?  
Which one is small?

1. Jug = \_\_\_\_\_

2. Cup= \_\_\_\_\_

3. Glass = \_\_\_\_\_

4. Bucket = \_\_\_\_\_

5. Basin = \_\_\_\_\_

6. Jerrican = \_\_\_\_\_

7. Drum = \_\_\_\_\_

### LESSON 5: Read and write measurements of capacity from hl to ml

Unit of capacity	Symbol
Hectoliter	

	Dal
Liter	
	DI
Centiliter	
Milliliter	

**LESSON 6: Addition and subtraction of capacity measurement of whole and decimal numbers up to 2 decimal places in meaningful contexts**

1. 2liters + 7 liters = \_\_\_\_\_liters

2. 9.34 liters + 7.28 liters = \_\_\_\_\_liters



3. 20 liters + 13 liters = \_\_\_\_\_liters

4. 8.79 liters + 3.91 liters = \_\_\_\_\_liters

5. 3.75 liters - 2.34 liters = \_\_\_\_\_liters

6. 5l 7dl - 3l 5dl = \_\_\_\_\_l \_\_\_\_\_dl

7. 8.37 liters - 5.32 liters = \_\_\_\_\_liters

8. 8.53 liters - 5.75 liters = \_\_\_\_\_liters

9. 6l 4dl - 3l 5dl = \_\_\_\_\_l \_\_\_\_\_dl

**LESSON 7: Conversion of capacity measurements, with application problems in meaningful contexts**

1. Write 300 ml into centiliters = \_\_\_\_\_

2. Write 5dal into liters= \_\_\_\_\_

3. Convert 3 liters 7 dl into deciliters \_\_\_\_\_
4. Write 35hl into liters \_\_\_\_\_
5. Write 5000 ml in deciliters \_\_\_\_\_
6. Write 750 dl into liters \_\_\_\_\_
7. Convert 10 liters into ml \_\_\_\_\_
8. Write 20 dal into hl \_\_\_\_\_

### **LESSON 8: Solve real life problems involving capacity measurement**

1. Kagere bought 12 liters of milk. On the same day, Ali bought 5 liters of milk. How much milk did they buy altogether?
2. A tank had 24 liters. Nsubunga added 9 liters into the tank. How much water was in the tank?

3. A bucket had 10.5 liters of water. 1.3 liters were added to the bucket. How much is in the bucket?
  
4. My pot had 3.4 liters of water. I added 4 liters of water. How much water is in my pot?
  
5. A water tank had 24 liters of water in the morning. She used 14 liters of it. How many liters remained in the tank?
  
6. Sibomana had 5 liters 8 deciliters of milk. He used 2l 5dl to prepare tea. How much milk was he left with?
  
7. A pupil had 2.53 l of juice. The pupil drank 1.32 l of it. How much juice remained?
  
8. Becky had 2.1 liters of milk. She used 1.3 liters to prepare tea for the children. How much milk was she left with?

## **UNIT 8: MASS MEASUREMENT**

### **LESSON 1: Introductory activity on the concept of mass**

Relate the following to their mass

1. A grade 4 child \_\_\_\_\_ to \_\_\_\_\_ kg
2. A pineapple \_\_\_\_\_ to \_\_\_\_\_ kg

3. An exercise book \_\_\_\_\_ to \_\_\_\_\_ kg
4. A small packet of tea leaves \_\_\_\_\_ to \_\_\_\_\_ kg
5. 1 liter of milk \_\_\_\_\_ kg

Match the following to their mass.

- |                          |        |
|--------------------------|--------|
| a. 1 bag of cement       | 120 kg |
| b. 1 sack of maize flour | 1 kg   |
| c. 1 sack of beans       | 5 hg   |
| d. 1 liter of water      | 50 kg  |
| e. 1 mug of beans        | 100 kg |

### LESSON 2: Units of mass

Unit of mass	Symbols


### LESSON 3: Measuring different masses in kg

Name 4 instruments used to measure weight.

- A. \_\_\_\_\_
- B. \_\_\_\_\_
- C. \_\_\_\_\_
- D. \_\_\_\_\_

Weigh and record.

a. You and your friend = \_\_\_\_\_

b. Your school bag = \_\_\_\_\_

c. Math textbooks = \_\_\_\_\_

d. A box of markers = \_\_\_\_\_

e. A paper bag of sand = \_\_\_\_\_

f. A 4-liter jerrycan of water = \_\_\_\_\_

#### **LESSON 4: Estimation of the mass of different objects**

Estimate using heavier or lighter.

1. A chair is \_\_\_\_\_ than a table

2. A book is \_\_\_\_\_ than a pen

3. A ball is \_\_\_\_\_ than a bag

4. A pencil is \_\_\_\_\_ than ruler

5. Shoes are \_\_\_\_\_ than slippers

**LESSON 5: Read and write measurement of mass measurement from tone (t) to milligram (mg)**

Write the following units in full.

1. Dg \_\_\_\_\_

2. Mg \_\_\_\_\_

3. Dag \_\_\_\_\_

4. Cg \_\_\_\_\_

5. Hg \_\_\_\_\_

6. G \_\_\_\_\_

7. Kg \_\_\_\_\_

8. T \_\_\_\_\_

Write true or false.

1.  $Hg > g$  \_\_\_\_\_

2.  $Cg < mg$  \_\_\_\_\_

**LESSON 6: Addition and subtraction of mass measurement of whole and decimal numbers up to 2 decimal places in meaningful contexts**

1.  $6.75kg + 45dag =$  \_\_\_\_\_ kg

2.  $2.95 t + 50kg =$  \_\_\_\_\_ t



3.  $4.4\text{g} + 150\text{cg} = \underline{\hspace{2cm}} \text{kg}$

4.  $3.15\text{g} + 185 \text{cg} = \underline{\hspace{2cm}} \text{cg}$

5.  $35.9 \text{dag} + 111\text{g} = \underline{\hspace{2cm}} \text{dag}$

6.  $3.2 \text{kg} - 1,200 = \underline{\hspace{2cm}} \text{kg}$

7.  $2\text{kg} - 2\text{hg} = \underline{\hspace{2cm}} \text{hg}$

8.  $3.6\text{t} - 4.26 \text{q} = \underline{\hspace{2cm}} \text{kg}$

9.  $18\text{kg} - 15.7\text{hg} = \underline{\hspace{2cm}}$

**LESSON 7: Conversion of mass measurements, with application problems in meaningful contexts**

1.  $6\text{tonnes} = \underline{\hspace{2cm}} \text{quintals} = \underline{\hspace{2cm}} \text{Kg}$

2.  $5.25\text{kg} = \underline{\hspace{2cm}} \text{dag} = \underline{\hspace{2cm}} \text{g}$

3.  $0.85\text{g} = \underline{\hspace{2cm}} \text{cg} = \underline{\hspace{2cm}} \text{mg}$

4.  $7,500 \text{g} = \underline{\hspace{2cm}} \text{kg} = \underline{\hspace{2cm}} \text{hg}$

5.  $4\text{kg} \underline{\hspace{2cm}} \text{hg} = \underline{\hspace{2cm}} \text{g}$

6.  $3,450\text{g} = \underline{\hspace{2cm}} \text{hg} = \underline{\hspace{2cm}} \text{dag}$

7.  $3.4\text{kg} = \underline{\hspace{2cm}} \text{hg} = \underline{\hspace{2cm}} \text{dag}$

8.  $0.125\text{kg} = \underline{\hspace{2cm}} \text{dag} = \underline{\hspace{2cm}}$

### **LESSON 8: Solving real life problems involving mass measurement**

1. Nsenga weighs 320hg. Kampire weighs 30kg. Find their total weight in dag.
  
2. Izana bought 250dag of meat. She cooked 20 dag of it. How many decagrams of meat remained?

3. Mutesi harvested 3,000kg of maize last year. This year she got 5.7tonnes. How many tonnes of maize did she harvest altogether?

4. Gahigi bought 9,870g of sugar. He sent 4.37 kg to his mother. How many kg of sugar remained?

5. The table below shows masses of sugar sold in a week.

<b>Days</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
Amount	10.2kg	9.5kg	1.23kg	8.3kg	10.7dag

a. How much sugar was sold from Monday to Wednesday? \_\_\_\_\_

b. How much more sugar was sold on Thursday than Friday? \_\_\_\_\_

## **UNIT 9: AREA AND LAND MEASUREMENTS**

### **LESSON 1: Introduction to the concept of area/land measurement**

1. Read and follow the instructions well.

a. Get a meter ruler, a string and 4 sticks.

b. Fix 1 stick in the ground.

c. Measure a distance of 1 meter from it.

- d. Use the string and 3 other sticks.
- e. Form a square shape of 1 meter all round.
- f. What is a square unit or a square shape?

2. Find the surface area by counting unit squares

a.



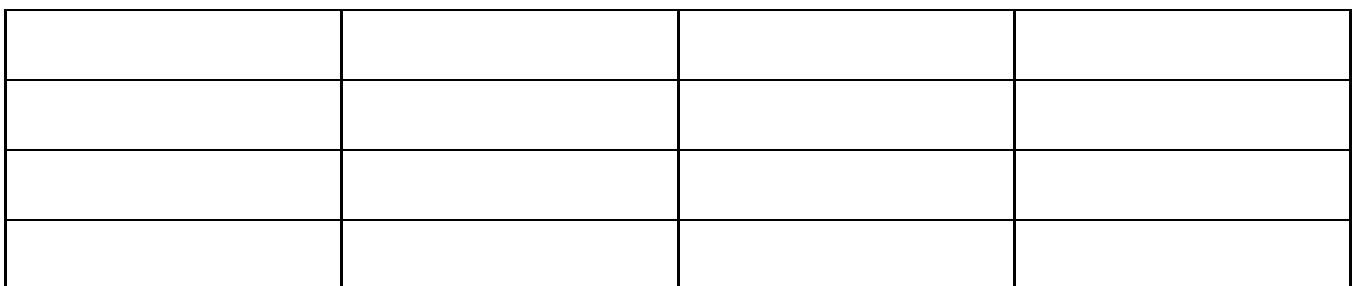
b.



c.



d.



e.


f.


### LESSON 2: Reading and writing measurement of area/land

Write the following in full.

a.  $1\text{dam}^2$

---

b.  $1\text{hm}^2$

---

c.  $1\text{dm}^2$

---

d.  $1\text{mm}^2$

---

e.  $1\text{cm}^2$

---

f.  $1\text{Dm}^2$

---

Write the following in short.

a. One square decimeter. = \_\_\_\_\_

b. One square decameter = \_\_\_\_\_

c. One square centimeter = \_\_\_\_\_

d. One square meter= \_\_\_\_\_

e. One square hectometer= \_\_\_\_\_

### **LESSON 3: Area of a square and a rectangular pieces of land (2D shapes)**

1. Mukamana's dining table top measures 3m by 2m. What is its area?
  
  
  
  
  
  
  
  
  
  
2. The path from the head teacher's office to the main hall is 14 m long. Its width is 2 m. calculate the area of the path.

3. A football pitch is 80 meters by 50 meters. Find its area.

4. Munyaneza made a rectangular table. Its length was 90 cm and width 65 cm. What was its area?

5. A square piece of land measures by 72m. Find its area.

**LESSON 4: Relationship between area and land measurements: conversion of area and land measurement**

Land measurement	Area measurement
Hectare ( ha)	
Are ( a)	
Centare ( ca)	

### LESSON 1: Addition and subtraction of the area of land

1.  $600\text{m}^2 + 200\text{m}^2 =$  \_\_\_\_\_  $\text{m}^2$

2.  $1052\text{m}^2 + 878\text{m}^2 =$  \_\_\_\_\_  $\text{m}^2$

3.  $92.83 \text{ ares} + 21.74\text{ares} =$  \_\_\_\_\_ ares

4.  $575\text{dam}^2 + 708 \text{ ares} =$  \_\_\_\_\_ ares

5.  $78\text{hm}^2 + 56\text{ha} =$  \_\_\_\_\_ ha

6.  $1500\text{m}^2 - 500\text{m}^2 =$  \_\_\_\_\_ ca



7.  $5.052 \text{ dam}^2 - 3.02 \text{ dam}^2 =$  \_\_\_\_\_ ares

8.  $708 \text{ m}^2 - 100 \text{ m}^2 =$  \_\_\_\_\_  $\text{m}^2$

9.  $23 \text{ cm}^2 - 10 \text{ cm}^2 =$  \_\_\_\_\_  $\text{cm}^2$

10.  $627.38 \text{ ha} - 342.03 \text{ hm}^2 =$  \_\_\_\_\_  $\text{hm}^2$

## **LESSON 2: Solving real life problems involving area and land measurement**

1. Alex's piece of land measures 50m by 100 m. What is the area of the land?
2. On a drawing  $1 \text{ m}^2$  represented by 1 ca. How many ca will represent  $70 \text{ m}^2$ ?
3. Lucumu planted 6.71 ha with maize. He also planted 9.64 ha with sweet potatoes. Find the used area of land in centares.

4. Mukandoli bought 7.4 ha of land. She later bought ca from her neighbor. What is her total land measures in ares?
5. A school had 15.73 ares of land. It bought 12,500 centares of land. Find the total area of land it owns now in ares.
6. A company bought 2875 ares of land. They used 13.2ha to build a warehouse. Find the size of land that remained in ha.
7. Kamana gave away 38.44 ares of his land to his sister. He had 1.12ha before. What part in ares did he remain with?
8. MRS. Kagabo had 8ha. He sold 1265ca to Paul. What area of the land remained in ares?