**KIGALI CITY**

**GASABO DISTRICT**

**PRIMARY THREE**

**MATHEMATICS SCHEME OF WORK**

**ACADEMIC YEAR : 2022-2023**

 **FIRST TERM**

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| **Weeks & Dates** | **Unit & title** | **LESSON TITLE** | **LEARNING OBJECTIVES** | **TEACHING METHODS &TECHNICS** | **RESOURCES & REFERENCE** | **OBSERVATION** |
| **WEEK 1****26-30/09/2022** | UNIT1: Numbers from 0 to 2000 | LESSON1:Reading and writing numbers in words and in figures from 0 to 2000LESSON 2Expanding numbers of 4 digits less than 2000 ( ones , tens, hundreds and thousands.)LESSON 3:Comparison of 2 numbers less than 2000 using < ,> and =LESSON 4Arranging numbers less than 2000 on both ascending and descending order.LESSON 5:Addition of numbers whose answers will not exceed 2000LESSON 6:World problems involving addition with the answer not exceeding 2000 | **KNOWLEDGE AND UNDERSTANDING*** name all place values through to 2000 in spoken and written form
* Identify the place values in written numerals.
* Read written numerals correctly in English
* Explain the process of addition of 2 numbers of 4 digits with or without carrying
* Explain the process of subtraction 2 numbers of 4 digits with or without borrowing
* Explain process of multiplication of 2 numbers with or without carrying
* Explain the process of division of 4 digits numbers with or without remainders
* Explain the process of solving mathematical word problems involving 4 operations on 2 or more numbers of 2 digits .
 | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 2****03-07/10/2022** |  | LESSON 7:Subtraction of numbers less than 2000LESSON 8 :Word problems involving subtraction of numbers less than 2000LESSON 9:Multiplication table of 7 with multiples less than or equal to 70.LESSON 10:Multiplication table if 8 with multiples less than or equal to 80 .LESSON 11:Multiplication table of 9 with multiples less than or equal to 90LESSON 12:Multiplying a 3 digit number by another of 1 digit with the answer less than 2000 | **SKILLS:*** Use place value to compare numbers of 4 digits
* Correctly translate between written numerals and spoken English
* Apply comparison of numbers in daily life.
* Carry out addition and subtraction of 2 or more whole numbers.
* Carry out multiplication of 2 numbers whose product does not exceed 10000
* Solve daily life mathematical problems involving addition , subtraction, multiplication or division
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| **WEEK 3****10-14/10/2022** |  | LESSON13:Word problem on multiplication of a 3 digit number by another of 1 digit with the answer less than 2000LESSON14:Multiplying by 10 ,100 and 1000 . The answer does not exceed 2000.LESSON15:Exact division of 4 digit number by a single digit number with the answer less than or equal to 2000LESSON16:word problem on division LESSON 17: End unit assessment | **ATTITUDES AND VALUES*** Developing personal confidence in the use of numbers
* Appreciate the importance of addition, subtraction, multiplication and division in daily life.
* Appreciate the importance of working out numbers quickly and accurately
 | Evaluation procedures: written: general test of open and closed questions |  |  |
| **WEEK 4****17-21/10/2022** | **Unit: 2**numbers from 0 to 5000 | LESSON 1:Reading and writing numbers from 0 to 5000 both in words and in figuresLESSON 2:Expanding and decomposing numbers of 4 digits into ones ,tens ,hundreds and thousands LESSON 3:Arranging numbers from 0 to 5000 on both ascending and descending order LESSON 4:Comparison of 2 numbers using <,>,= LESSON 5Addition of numbers with the answer not exceeding 5000LESSON 6:Word problems on addition with the answer not exceeding 5000 | **KEY UNIT COMPETENCE:**Counting ,reading , writing ,comparing and applying 4 operations on numbers of 4 digits  | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 5****24-28/10/2022****WEEK 6****31/10-04/11/2022** |  | LESSON 7:Subtraction of numbers with the answer less than 5000LEASON 8: Multiplying a 3 digits number by a 2 digits number with the answer not exceeding 5000.LESSON 9Word problems on multiplying a 3 digits number by a 2 digits number with the answer not exceeding 5000LESSON 10Multiplying a number by 100 and 1000 with the answer not exceeding 5000LESSON 11:Exact division of a 4 digits number by a single digit number with the answer not exceeding 5000LESSON 12Word problems on divisionLESSON 13:End unit assessment |  | Evaluation procedures: written: general test of open and closed questions |  |  |
| **WEEK 7****07-11/11/2022****WEEK 8****14-18/11/2022** | UNIT 5: LENGTH MEASUREMENT | LESSON 1: introduction to the units of lengthLESSON 2:Relationship between units of lengthLESSON 3 : Converting units of length LESSON 4:Comparison of units of lengthLESSON 5: Arranging units of length LESSON 6: Addition of units of lengthLESSON 7: Subtraction of units of length | KNOWLEDGE:Recalling the units of length and relationship between them SKILLS :Measuring distance between 2 items correctly ATTITUDE:Developing a sense of critical thinkingKEY UNIT COMPTENCES : Measuring ,comparing ,adding, subtracting ,multiplying and dividing units of lengthwith a whole number | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 9****21-25/11/2022** |  | LESSON 8 : Word problem on both addition and subtraction of length measurementLESSON 9: Multiplying units of length LESSON 10:Dividing units of length LESSON11: Word problem on multiplication and division of units of lengthLESSON 12: End unit assessment |  |  |  |  |
| **WEEK 10****28/11-02/12/2022** | UNIT 10: TYPES OF LINES AND ANGLES  | LESSON 1: Types of lines LESSON 2:Types of angles LESSON 3: Using protractor to measure the size of an angleLESSON 4: Comparison of angles LESSON 5: End unit assessment |  | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017  |  |
| **WEEK 11****05-09/12/2022** | REVISION |
| **WEEK 12****12-16/12/2022** | EXAMEN |
| **WEEK 13****19-23/12/2022** | Marking ,preparing report and closing the first term |

 **SECOND TERM**

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| **Weeks & Dates** | **Unit & title** | **LESSON TITLE** | **LEARNING OBJECTIVES** | **TEACHING METHODS &TECHNICS** | **RESOURCES & REFERENCE** | **OBSERVATION** |
| **WEEK 1****09-13/01/2023** | UNIT 4Fractions of denominator less than 10 | Lesson 1 : Reading and writing fractions whose denominator is less than 10Lesson 2 : drawing and shading fractions less than a unit and denominators less than 10Lesson 3:comparison of fractions of the same denominators Lesson 4: arranging fractions of the same denominators Lesson 5: addition of fractions of the same fractions Lesson 6: word problems on addition of fraction  | **KNOWLEDGE AND UNDERSTANDING*** Read and write fractions
* Explain the meaning of numerator and denominator in the size of a fraction
* Explain and show how adding or subtracting same denominator fractions is like adding any other unit: meters, grams
* Explain how to multiply fractions by whole numbers and by fractions.
* Explain how divide fractions by whole numbers and by fractions
* Explain the process of solving problems involving addition, subtraction, multiplication, and division of fractions
 | Math’s game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 2****16-20/01/2023** |  | Lesson 7: subtraction of fraction of the same denominators   Lesson 8: word problem on subtraction of the fraction of the same denominators Lesson 9 : calculating the complement of the fraction Lesson 10 : calculating the fraction of the whole number Lesson 11: problems on the fraction of the whole Lesson 12: importance of the fractions in daily life  Lesson 13 : end unit assessment | **SKILLS: SKILLS*** Compare two fractions with the same denominator
* Add and subtract fractions that have the same denominator

Apply the knowledge of fractions to solve mathematical problems that involve operation of fractions**ATTITUDES AND VALUES ATTITUDES AND VALUES*** Appreciate the importance of accuracy out operations on fractions
* Develop personal confidence in carrying out operations on fractions

Develop the spirit of sharing **KEY UNIT COMPETENCE**Explain the meaning of fractions, add and subtract same –denominator fractions multiply fractions accurately |  |  |  |
| **WEEK 3****23-27/01/2023** | UNIT 6: Mass measurements  | LESSON 1: introduction to the units of massLESSON 2:Relationship between units of massLESSON 3 : Converting units of massLESSON 4:Comparison of units of massLESSON 5: Arranging units of massLESSON 6: Addition of units of massLESSON 7: Subtraction of units of mass | KNOWLEDGE:Recalling the units of length and relationship between them SKILLS :Measuring the mass of items correctly ATTITUDE:Developing a sense of critical thinking |  |  |  |
| **WEEK 4****30/01-03/02/2023** |  | LESSON 8 : Word problem on both addition and subtraction of mass measurementLESSON 9: Multiplying units of massLESSON 10:Dividing units of massLESSON11: Word problem on multiplication and division of units of massLESSON 12: End unit assessment |  KEY UNIT COMPTENCES : Measuring ,comparing ,adding, subtracting ,multiplying and dividing units of mass with a whole number |  |  |  |
| **WEEK 5****06-10/02/2023** | UNIT :7MEASUREMENT OF CAPACITY | LESSON 1: introduction to the units of capacityLESSON 2:Relationship between units of capacity LESSON 3 : Converting units of capacityLESSON 4:Comparison of units of capacityLESSON 5: Arranging units of capacity LESSON 6: Addition of units of capacityLESSON 7: Subtraction of units of capacity | KNOWLEDGE:Recalling the units of capacity and relationship between them SKILLS :Measuring the capacity of items correctly ATTITUDE:Developing a sense of critical thinking |  | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 6****13-17/02/2023** |  | LESSON 8 : Word problem on both addition and subtraction of capacity measurementLESSON 9: Multiplying units of capacityLESSON 10:Dividing units of capacityLESSON11: Word problem on multiplication and division of units of capacityLESSON 12: End unit assessment | KEY UNIT COMPTENCES : Measuring , comparing ,adding, subtracting ,multiplying and dividing units of capacity with a whole number. |  |  |  |
| **WEEK 7****20-24/02/2023** | UNIT 11: SQUARE,RECTANGLE, TRIANGLE AND CIRCLE  | . LESSON 1: Introduction and properties of the squareLESSON 2: Perimeter of the square LESSON 3Calculating the side of the square  |  |  | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 8****27/02-03/03/2023** |  | LESSON 4: Introduction on rectangle LESSON 5: Calculating the perimeter of the rectangle LESSON 6: Introduction to triangle LESSON:7 Calculating the perimeter of the triangle  |  |  |  |  |
| **WEEK 9****06-10/03/2023** |  | LESSON 8: Introduction to circleLESSON 9: Relationship between radius and diameter LESSON 10 : End unit assessment |  |  |  |  |
| **WEEK 10****13-17/03/2023** | Revision |
| **WEEK 11****20-24/03/2023** | Exams  |
| **WEEK 12****27-31/03/2023** | Marking  |

 **THIRD TERM**

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| **Weeks & Dates** | **Unit & title** | **LESSON TITLE** | **LEARNING OBJECTIVES** | **TEACHING METHODS &TECHNICS** | **RESOURCES & REFERENCE** | **OBSERVATION** |
| **WEEK 1****17-21/04/2023** | UNIT 12: CARTESIANE PLAN |  LESSON 1: Introduction on Cartesian plane LESSON 2:  Locating a point in a Cartesian plane   LESSON 3 : Joining and naming an obtained an obtained figure  LESSON 4: End unit assessment  |  **Knowledge :** Able to name the obtained geometric figures **Skills :** sketching a Cartesian plane which is equidistantly graduated Attitude and value: Appreciating the use of a Cartesian plan in our daily life **Key unit competence :**Constructing a well graduated Cartesian plan and plotting points in it.  | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 2****24-28/04/2023****WEEK 3****01-05/05/2023** |  UNIT : 13CALCULATING A MISSING NUMBER IN ADDITION , SUBTRACTION,MULTIPLICATION AND DIVISION  | LESSON 1:Calculating a missing number in addition (2 periods ) LESSON 2: Calculating a missing number in subtraction ( 3 periods)LESSON 3: Calculating a missing number in multiplication |  | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 4****08-12/05/2023** |  |  LESSON 4:Calculating a missing number in division  LESSON 5 : Introduction to the algebra and of the sign =LESSON 6: Completing the missing number in a sequence  LESSON 7 :End unit assessment  |  |  |  |  |
| **WEEK 5****15-19/05/2023** |  UNIT 8: MONEY  |  LESSON1: Characteristics of Rwandan currency and the value up to 5000LESSON 2: Uses of money LESSON 3:Ways of getting money LESSON 4: Changing moneyLESSON 5: Problems on changing money LESSON 6 : Problems on addition of money LESSON 7: Problems on subtraction of money  |  **KNOWLEDGE AND** **UNDERSTANDING*** Recognize and identify the various denominations of Rwandan currencies
* State different ways of using money to meet the needs of families.
* Explain the process of simple budgeting based on priorities
 | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 6****22-26/05/2023****WEEK 7****29/05-02/06/2023** |  | LESSON 8: Problems on multiplication of moneyLESSON 9: Problems on division of money LESSON 10 : Buying and selling LESSON : 11Importance of saving LESSON 12:Small business which generate profit LESSON 13: End unit assessment  | **SKILLS*** Classify needs and wants
* Carry out calculation in simple business transactions
* Solve problems involving buying and selling

ATTITUDES AND VALUES* Appreciate the importance of money in daily life situations
* Show concern of using money honestly

**KEY UNIT COMPETENCE**: To be able to understand money and its financial application |  |  |  |
| **WEEK 8****05-09/06/2023** | UNIT 9: MEASUREMENT OF TIME  |  LESSON1 :Reading time on a clock faceLESSON 2:Reading and writing time on a clock face LESSON 3: Calendar  | **KNOWLEDGE AND UNDERSTANDING*** Recognize different unit of time
* Explain the process of solving mathematical problems involving time
* Explain the meaning of am and pm

**SKILLLS*** Read and tell the time accurately
* Apply acquired knowledge to convert between units of time
* Correctly write units of time
 | Math game, demonstration, group work, individual work , brain storming , question and answer method | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 9****12-16/06/2023** |  | LESSON 4: Leap year and ordinary year LESSON 5:Converting years into months LESSON 6: Converting weeks in days  LESSON 7 :Converting days in hours LESSON 8: Scheme of work LESSON 9: End unit assessment   | **ATTITUDES AND VALUES*** Appreciate value of time management in daily situations

**KEY UNIT COMPETENCE**: To be able to tell, write and convert time appropriately |  |  |  |
| **WEEK 10****19-23/06/2023** | UNIT 14: PICTOGRAPHY  |  LESSON 1: Diagram used to show the amount of things LESSON 2: Classifying items and demonstrating items using diagrams LESSON 3: Making a diagram to be used in counting using given items  LESSON 4:End unit assessment |  |  | MURENZI Emmanuel “igitabo cy,imibare umwaka wa 3 “ high land publishers ,Kigali ,2017 Page : |  |
| **WEEK 11****26-30/06/2023** | **REVISION**  |
| **WEEK 12****03-07/07/2023** | **EXAMS** |
| **WEEK 13****10-14/07/2023** | **CORRECTION**  |
| **WEEK 14****17-19/07/2023** |  **PNLE**  |