**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 2000  LESSON 2  Expanding numbers of 4 digits less than 2000 ( ones , tens, hundreds and thousands.)  LESSON 3:  Comparison of 2 numbers less than 2000 using < ,> and =  LESSON 4  Arranging numbers less than 2000 on both ascending and descending order.  LESSON 5:  Addition of numbers whose answers will not exceed 2000  LESSON 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 2000  LESSON 8 :  Word problems involving subtraction of numbers less than 2000  LESSON 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 90  LESSON 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 |  |  |  |
| **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 2000  LESSON14:  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 2000  LESSON16:  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 figures  LESSON 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 5  Addition of numbers with the answer not exceeding 5000  LESSON 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 5000  LEASON 8:  Multiplying a 3 digits number by a 2 digits number with the answer not exceeding 5000.  LESSON 9  Word problems on multiplying a 3 digits number by a 2 digits number with the answer not exceeding 5000  LESSON 10  Multiplying a number by 100 and 1000 with the answer not exceeding 5000  LESSON 11:  Exact division of a 4 digits number by a single digit number with the answer not exceeding 5000  LESSON 12  Word problems on division  LESSON 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 length  LESSON 2:  Relationship between units of length  LESSON 3 :  Converting units of length  LESSON 4:  Comparison of units of length  LESSON 5:  Arranging units of length  LESSON 6:  Addition of units of length  LESSON 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 thinking  KEY 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 measurement  LESSON 9: Multiplying units of length  LESSON 10:Dividing units of length  LESSON11: Word problem on multiplication and division of units of length  LESSON 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 angle  LESSON 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 4  Fractions of denominator less than 10 | Lesson 1 : Reading and writing fractions whose denominator is less than 10  Lesson 2 : drawing and shading fractions less than a unit and denominators less than 10  Lesson 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 mass  LESSON 2:  Relationship between units of mass  LESSON 3 :  Converting units of mass  LESSON 4:  Comparison of units of mass  LESSON 5:  Arranging units of mass  LESSON 6:  Addition of units of mass  LESSON 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 measurement  LESSON 9: Multiplying units of mass  LESSON 10:Dividing units of mass  LESSON11: Word problem on multiplication and division of units of mass  LESSON 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 :7  MEASUREMENT OF CAPACITY | LESSON 1: introduction to the units of capacity  LESSON 2:  Relationship between units of capacity  LESSON 3 :  Converting units of capacity  LESSON 4:  Comparison of units of capacity  LESSON 5:  Arranging units of capacity  LESSON 6:  Addition of units of capacity  LESSON 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 measurement  LESSON 9: Multiplying units of capacity  LESSON 10:Dividing units of capacity  LESSON11: Word problem on multiplication and division of units of capacity  LESSON 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 square  LESSON 2:  Perimeter of the square  LESSON 3  Calculating 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 circle  LESSON 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 : 13  CALCULATING 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 5000  LESSON 2:  Uses of money  LESSON 3:  Ways of getting money  LESSON 4:  Changing money  LESSON 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 money  LESSON 9: Problems on division of money  LESSON 10 :  Buying and selling  LESSON : 11  Importance 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 face  LESSON 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** | | | | | |