**SCHEME OF WORK OF MATHEMATICS**

**THE CITY OF KIGALI**

**DISTRICT : GASABO**

**ACADEMIC YEAR: 2022-2023**

**SUBJECT: MATHEMATICS**

**CLASS: PRIMARY FOUR (P4)**

**TEACHER'S NAME: ……………………………………………………… SCHOOL……………………………………………………….. SECTOR……………………………………………..**

**NUMBER OF PERIODS PER WEEK: 8 PERIODS**

 **FIRST TERM**

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| **DATES AND WEEKS** | **UNIT TITLE** | **LESSON TITLE** | **LEARNING OBJECTIVES** |  **METHODS AND TECHNIQUES** | **RESOURCES**  | **OBSERVATION** |
| **WEEK 1****26-30/09/2022****WEEK 2****03-07/10/2022****WEEK 3****10-14/10/2022****WEEK 4****17-21/10/2022****WEEK 5****24-28/10/2022****WEEK 6****31/10-04/11/2022** | **UNIT 1**Mathematical operations on whole numbers up to 100000 | **LESSON 1:**Reading and writing in words ( 3 periods)**LESSON 2:**Reading and writing in figures Place value of numbers up to five digitsComparing numbers using <,>,= (3)**LESSON 3:**Addition of 2 or more whole numbers , with or without carrying, whose sum does not exceed 100000(1 period)Addition of 2 or more whole numbers , with or without carrying, whose sum does not exceed 100000(3 period)**LESSON 4:**Subtraction of whole numbers between 0 and 100,000 with or without borrowing (4)LESSON 5:Multiplication whole numbers by two digit numbers (5)**LESSON 6:**Product of a 2 digit numbers by 10, 100,1000, 10,000 (2)**LESSON 7:**Multiply numbers using quick multiplication ( 2 period)**LESSON 8**:Divide by single digit number ( 5 period)**LESSON 9:**Solve mathematical problems involving addition, subtraction, multiplication or division of numbers (7 period )**LESSON 10:**Summative evaluation ( 1 period) | **KNOWLEDGE AND UNDERSTANDING*** name all place values through to 100000, 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 5 digits with or without carrying
* Explain the process of subtraction 2 numbers of 5 digits or more with or without borrowing
* Explain process of multiplication of 2 numbers or more with or without carrying
* Explain the process of division of 2 digit numbers with or without remainders
* Explain the process of solving mathematical word problems involving 4 operations on 2 or more numbers of 2 digits or more.

**SKILLS*** Use place value to compare numbers of any size
* 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 or more whole numbers whose product does not exceed 100,000
* Solve daily life mathematical problems involving addition , subtraction, multiplication or division

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

**KEY UNIT COMPETENCE** : To be able to classify animals into their main groups based on external features | Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan school (page:5-25) |  |
| UNIT 2:Positive and negative integers. | **LESSON 1:**The meaning of negative and positive numbers in contexts like temperature, buying and selling , etc ( 2 period)**LESSON 2:**Location of positive and negative numbers on a number line.( 2)**LESSON 3**:Comparison / ordering of negative and positive numbers using a number line ( 2 period)**LESSON 4:**Solving problems involving integers, including computing distance between integers:-if two numbers are on the same side of zero ,the distance between them is the difference of their magnitudes (1)**LESSON 5:**Solving problems involving integers, including computing distance between integers:* If two numbers are on opposite sides of zero, the distance between them is the sum of their magnitudes (1)

**LESSON 6:**Summative evaluation ( 1 period) | **KNOWLEDGE AND UNDERSTANDING*** Locate positive and negative numbers on the number line
* Explain that when two numbers are placed on the number line , the number to the right is greater than the number to the left,

**SKILLS*** Locate positive and negative numbers on the number line
* Apply knowledge of position on a number line to determine which of two number is greater
* Compute distance between integers.

**ATTITUDES AND VALUES*** Appreciate the importance of using positive and negative numbers in practical contexts.

**KEY UNIT COMPETENCE** : To be able to solve problems related to comparing, ordering, and finding the distance between negative and positive integers | Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools(page:30-37) |  |
| UNIT 3Classify numbers by their properties | **LESSON 1:**Odd, even, square numbers, square root, prime numbers, multiples of numbers, factors of numbers( period 1)LESSON 2:Squares and exact square roots (1)**LESSON 3:**Problems involving square roots (1)**LESSON 4:*** Calculating the LCM (1)

**LESSON 5:** Summative evaluation ( 1 period) | **KNOWLEDGE AND UNDERSTANDING*** Explain the meaning of odd, even, square numbers, square root, prime numbers, factors of numbers.
* List numbers in each family and explain the properties of different families of numbers
* State the method/steps for calculating the lowest common multiple (LCM )

**SKILLS*** Classify numbers as odd, even, square numbers, prime numbers, multiples of a given number
* Calculate the LCM of two numbers
* Calculate the square of a number and find the square root of a square number ≤ 100

**ATTITUDES AND VALUES*** Appreciate the importance of using square and square roots
* Being cooperative and displaying a team work spirit
* Demonstrate creativity in problem solving
* Being attentive

**KEY UNIT COMPETENCE** : Be able to classify numbers flexibly, seeing them as belonging to various families | Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools.(Page 38-45) |  |
| UNIT 4Fractions of same denominator | **LESSON 1:**The meaning of fractions( 2 PERIOD) | **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

 **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*** 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 and divide fractions accurately. | Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools (page46-63) |  |

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| **WEEK 7****07-11/11/2022****WEEK 8****14-18/11/2022****WEEK 9****21-25/11/2022****WEEK 10****28/11-02/12/2022****WEEK 11****05-09/12/2022****WEEK 12****12-16/12/2022****WEEK 13****19-23/12/2022*****SECOND*** **WEEK 1****09-13/01/2023****WEEK 2****16-20/01/2023****WEEK 3****23-27/01/2023****WEEK 4****30/01-03/02/2023****WEEK 5****06-10/02/2023****WEEK 6****13-17/02/2023****WEEK 7****20-24/02/2023****WEEK 8****27/02-03/03/2023****WEEK 9****06-10/03/2023****WEEK 10****13-17/03/2023****WEEK 11****20-24/03/2023****WEEK 12****27-31/03/2023*****THIRD*** **WEEK 1****17-21/04/2023****WEEK 2****24-28/04/2023** | :UNIT 5Decimal fractions/ numbersREVISIONEXAMSCORRECTION***TERM***CORRECTION  | **LESSON 2:**Read , write , and compare fractions with the same denominator, including mixed fractions ( 2 period)**LESSON 3:**Addition of fraction with the same denominator (1)**LESSON 4:**Subtraction of fraction with the same denominator (1)**LESSON 5:**Problems involving addition and subtraction of fraction ( 3 period)\_Problems involving addition and subtraction of fraction ( 1 period**LESSON 6:**Multiplication of fraction by whole numbers. ( 2period)**LESSON 7**Multiplication of fraction by fractions, conceptually ( not an arbitrary rule) ( 2 period )**LESSON 8:**Division of fractions by a whole number ( 2 period )Division of fractions by a whole number ( 2 period )**LESSON 9**:Problems involving multiplication and division of fractions Problems involving multiplication and division of fractions **LESSON 10**:Summative evaluation ( 1 period)**LESSON 1:**The conce:3 of decimal fractions through ‘’zooming in’’ on the number line( period 2)**LESSON: 2**Place value of decimals up to 2 decimal places (1)**LESSON :3**Comparing decimal numbers ( period 1)**LESSON: 4**Addition of decimal fractions ( 1)Addition of decimal fractions ( 1)**LESSON :5**Subtraction of decimal fractions ( period 2)**LESSON :6**Problems involving addition and subtraction of decimals( period 4)**LESSON: 7**Summative evaluation ( 1 period)OF FIRST TERM  | **KNOWLEDGE AND UNDERSTANDING*** Explain the concept of decimal numbers using place values up to 2 decimal places
* Correctly read and write decimal numbers in figures and in words
* Identify the place values in written decimals

**SKILLS*** Compare 2 or more decimal numbers using <.>, =
* Correctly translate between decimals and spoken English
* Carry out addition or subtraction of decimal numbers up to 2 2 decimal places
* Apply decimal concept in solving daily life math problems

**ATTITUDES AND VALUES*** Develop personal confidence in the use of decimal numbers
* Appreciate the importance of decimal fractions in comparing and sharing

**KEY UNIT COMPETENCE**:Add, subtract and compare decimal numbers using place values of decimals up to 2 decimal placesEXAMINATION | Maths game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions |  |  |
| UNIT 6Length measurements | **LESSON:1**Estimate different small distances ( period 1)**LESSON: 2**Measure the length and perimeter of various objects in different unit ( 3 period)**LESSON: 3**Reading and writing measurements of length : km; dam, m, dm ,cm ,mm (1)**LESSON :4**Addition and subtraction of length measurement of whole and decimal numbers up to 2 decimal place in meaningful contexts( 1):Addition and subtraction of length measurement of whole and decimal numbers up to 2 decimal place in meaningful contexts( 3):**LESSON: 5**Conversion of length measurements with application problems in meaningful contexts ( 4)**LESSON: 6**Summative evaluation ( 1 period) | **KNOWLEDGE AND UNDERSTANDING*** Build on knowledge and understanding of measurement of length
* State different units of length measurements
* Explain the relationship between the units of length measurements
* Explain the perimeter of a shape as the distance around it

**SKILLS*** Appropriately estimate length and provide a justification
* Select and use appropriate instruments /tools/materials to measure lengths, using and interpreting scales correctly
* Read and write units of length measurements
* Accurately convert length measurements between different units
* Apply the knowledge of addition or subtraction and multiplication by whole number in solving mathematical problems involving length measurements.

**ATTITUDES AND VALUES*** Appreciate the importance of metric measures in daily life
* Recognize the importance of using measuring tools correctly.

**KEY UNIT COMPETENCE**: Convert between units of length and apply them in solving mathematical problems related to daily life situations, including perimeters | Evaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandans schools( page 74-89) Evaluation and written test of open and closed questions | Meter, decameter, ruler, rope, sticks, charts |
| UNIT 7Capacity measurements | **LESSON:1**Estimation of the capacity of difference object(1)**LESSON: 2**Measuring different capacities in liters (1)LESSON 3:Read and write measurement of capacity from hl to ml (1)**LESSON :4**Subtraction and addition of capacity measurement of whole and decimal numbers up to 2 decimal places in meaningful contexts(1)**LESSON: 5** Conversation of capacity measurements, with application problems in meaning full contexts (2)**LESSON: 6** Summative evaluation (1) | **KNOWLEDGE AND UNDERSTANDING*** Distinguish the capacity of different liquid containers through observation
* State the different units of capacity measurements
* Explain the relationship between units of capacity measurements
* Show the process of solving mathematical problems involving capacity measurement

**SKILLS*** Estimate the capacity of a liquid container through observation
* Select and use an appropriate tool/ material to measure the capacity of different liquid containers
* Correctly read and write units of capacity measurements
* Accurately convert different capacity measurements
* Apply the knowledge of addition or subtraction and multiplication by a whole number in solving mathematical problems involving capacity measurements

**ATTITUDES AND VALUES*** Show an ability to properly us arrange of materials to measure different liquids in daily life
* Be honest and trustworthy when measuring different capacities
* Show respect to one another when working in groups

**KEY UNIT COMPETENCE:** Convert between units of capacity and apply them in solving mathematical problems related to daily life situations | Evaluationprocedures: written: general test of open and closed questions | Maths game, demonstration, group work, individual work , brain storming , question and answer method | bottles of different capacities, bucket, charts( wit conversation table, worked examples on capacity measurements) textbooks |
| UNIT 8Mass measurement | **LESSON :1**Estimating mass of different thingsMeasuring different s object ( 1 period )**LESSON :2**Units of mass measurementsReading and writing measurements of mass from tone to milligram(1)**LESSON: 3**Addition and subtraction of mass measurements of whole and decimal numbers( 2)**LESSON: 4**Conversion of mass measurement, with application problems in meaningful contexts (2)**LESSON: 5**Summative evaluation (1)  | **KNOWLEDGE AND UNDERSTANDING*** Distinguish the mass of different containers through observation
* State the different units of mass measurements
* Explain the relationship between units of mass measurements
* Show the process of solving mathematical problems involving mass measurement

**SKILLS*** Estimate the mass of a container through observation
* Select and use an appropriate tool/ material to measure the mass of different l containers
* Correctly read and write units of mass measurements
* Accurately convert different mass measurements
* Apply the knowledge of addition or subtraction and multiplication by a whole number in solving mathematical problems involving mass measurements

**ATTITUDES AND VALUES*** Show an ability to properly us arrange of materials to measure different mass in daily life
* Be honest and trustworthy when measuring different mass
* Show respect to one another when working in groups
* Appreciate the importance mass measurement in daily life situation

**KEY UNIT COMPETENCE**: Convert between units of mass and apply them in solving | Evaluationprocedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools page(100-106)Math’s game, demonstration, group work, individual work , brain storming , question and answer method | Different scales( beam balance baby scale) ,… conversion table , textbooks |
| UNIT 9Area and land measurement | **LESSON: 1**Concept of unit of area /land measurement(2)**LESSON :2**Reading and writing measurements of area /land (1)**LESSON3:**Relationship between area and land measurements(2)**LESSON: 4**Understand area as the space enclosed by a boundary (1)Understand area as the space enclosed by a boundary (1)**LESSON :5**Conversion of area and land measurements (2)**LESSON: 6**Area of a rectangle including a square (3)**LESSON :7** Area of a rectangle piece of land ( 2D shapes ) ( 1)Area of a rectangle piece of land ( 2D shapes ) ( 1)**LESSON: 8**Addition and subtraction of area /land measurement of whole and decimal numbers up to 2 decimal places in meaningful contexts (4)**LESSON:9** Summative evaluation(1) | **KNOWLEDGE AND UNDERSTANDING*** Explain the concept of square units
* State the unit of area measurements
* Establish the relationship between the unit of area measurements
* List the unit of area and land measurements in ascending and descending order
* Correctly read and write units of area measurements
* Explain the process of adding and subtracting area measurements
* Understand the concept of land units
* State the unit of land
* Establish the relationship between the unit of land and area measurements
* Correctly read and write units of land measurement
* Explain the process of adding , subtracting or converting land measurement.

**SKILL*** Practically differentiate the measurements of area from the measurement of length
* Convert ,add, subtract or compare area or land measurement
* Solve mathematical problems related to finding the surface area of different shapes and plots of land
* Calculate the area as a space enclosed by a boundary without using the formula

**ATTITUDES AND VALUES*** Appreciate the importance of measurement of area and land in daily life
* Show how to properly use different area and land measurement in daily life situation

**KEY UNIT COMPETENCE:** To be able to understand area as the 2D space enclosed by a boundary, and use square and land units in solving mathematics problems | Evaluationprocedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools page (107-115)Ruler, tape measure, rope, sticks, squared paper , manila cards , charts, textbooks |  |
| UNIT 10TimeREVISION +EXAMINATION CORRECTION  ***TERM***CORRECTIONUNIT 11 Money and its financial application | **LESSON: 1**Reading and telling accurately using a calendar, digital and clock face. ( 1 period) **LESSON: 2**Write the time using ante meridiem to mean before noon (AM) and post meridiem to mean after noon (PM) (2)**LESSON :3**Conversion of time seconds into minutes, minutes into hours and vice versa. ( 3 period)**LESSON :4**Solve problems involving time, minutes and hours , dates and hours . (2)Solve problems involving time: minutes and hours , dates and hours . (1)**LESSON :5** Summative evaluation OF SECOND**LESSON; 1**Rwandan currency denomination and changing them: coins and notes(1)**LESSON; 2**Simple budgeting :* Sources of money
* Uses of money
* Planning according to needs and wants ( 3)

**LESSON: 3**Problems involving buying and selling:* Cost price
* Selling price
* Profit/ loss ( 1 period)

Problems involving buying and selling:* Cost price
* Selling price
* Profit/ loss ( 2 period)

 **LESSON: 4**Sommative evaluation  | **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

**ATTITUDES AND VALUES*** Appreciate value of time management in daily situations

**KEY UNIT COMPETENCE**: To be able to tell, write and convert time appropriatelyTERM EXAMS**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

**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 | Primary learner’s mathematics for Rwandan schools page( 128-135) procedures: written: general test of open and closed questions | Real money, pictures and drawings of Rwandan currencies, empty tins, soap, boxes and pens to build a classroom shop. |  |

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| **WEEK 3****01-05/05/2023****WEEK 4****08-12/05/2023** |  |  |  |  |  |  |
| UNIT 12Number patterns | **LESSON: 1**Arrange whole numbers in decreasing and increasing order(2)**LESSON: 2**Arithmetic progression ( 2 period)Arithmetic progression ( 2 period**LESSON :3**Geometric progression ( 4)**LESSON :4**Summative evaluation(1) | **KNOWLEDGE AND UNDERSTANDING*** Explain how to order whole numbers according to their size in increasing and decreasing order
* Explain the meaning of arithmetic and geometric progression

**SKILLS*** Determine the clue or pattern for a given arithmetic progression/geometric progression
* Differentiate between arithmetic progression and geometric progression
* Arrange whole numbers in different orders.

**ATTITUDES AND VALUES*** Appreciate the importance of orderliness in daily life
* Appreciate the sprite of hard work and self confidence

**KEY UNIT COMPETENCE:** To be able to describe and generate number patterns following a rule | Primary learner’s mathematics for Rwandan schools page (136-140)Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Manila cards , scissors and markers to prepare charts |  |
| UNIT 13Filling in missing numbers | **LESSON: 1**Solve simple missing number problems involving addition a( 5 period)**LESSON: 2**Solve simple missing numbers problems involving subtraction( 2)Solve simple missing numbers problems involving subtraction( 3)**LESSON: 3**Solve simple missing numbers problems involving addition and subtraction(3)**LESSON: 4**Summative evaluation ( 1) | **KNOWLEDGE AND** **UNDERSTANDING*** Know how to solve simple missing number problems involving addition and subtraction

**SKILLS*** Use relationship between numbers to solve missing number problems
* Create missing number problems

**ATTITUDES AND VALUES*** Appreciate the importance of inverse operations when solving missing number problems and checking answers

**KEY UNIT COMPETENCE**To be able to solve missing number problems involving addition and subtraction | Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools Page (141-144)Manila cards, masking tape, scissors and markers. |  |
| **WEEK 5****15-19/05/2023****WEEK 6****22-26/05/2023** | UNIT 14Types of lines and angles | **LESSON :1**Types of lines and measuring line segments using a ruler (2)**LESSON: 2**Types of angles , acute ,obtuse, right, straight, complementary, supplementary and reflex angles( 3 period)**LESSON :3**Measuring angles using protractor (2)**LESSON: 4**Summative evaluation (1) | **KNOWLEDGE AND** **UNDERSTANDING*** State different types of lines
* Identify and choose appropriate geometrical instruments
* Recognize types of angles ;

Acute, obtuse, right, straight, complementary, supplementary and reflex angles* Establish the difference between different angles based on their properties

**SKILLS*** Draw straight lines
* Measure line segment using a ruler
* Measure with precision different angles using a protractor
* Draw lines and measure different angles using appropriate geometrical instruments
* Differentiate types of angles based on their properties

**ATITUDES AND VALUES*** Appreciate the importance of lines and angles in daily activities
* Be confident and accurate when measuring

**KEY UNIT COMPETENCE**Learners should be able to identify types of lines and angles and use a protractor to measure angles | Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools Page(145-156)Protractor, manila cards and markers, ruler |  |
| **WEEK 7****29/05-02/06/2023** | UNIT 152D shapes and properties | **LESSON :1**Naming triangles on the bases of edge lengths( equilateral, isosceles, scalene) and greatest angle ( ACUTE, RIGHT, OBTUSE( (6 PERIOD)Naming triangles on the bases of edge lengths( equilateral, isosceles, scalene) and greatest angle ( ACUTE, RIGHT, OBTUSE( (1 PERIOD**LESSON: 2** Use of properties, sides ( equal, parallel) , angles ,diagonals( equal, bisect ,perpendicular), lines of symmetry to distinguish special quadrilaterals( square, rectangle , rhombus ,parallelogram, trapezium, kite) ( 6period)Use of properties, sides ( equal, parallel) , angles ,diagonals( equal, bisect ,perpendicular), lines of symmetry to distinguish special quadrilaterals( square, rectangle , rhombus ,parallelogram, trapezium, kite) ( 1period)**LESSON :3**Summative evaluation(1) | **KNOWLEDGE AND UNDERSTANDING*** Name triangles and quadrilaterals
* Understand a line of symmetry as a fold that produces matching halves
* Understand order of rotation as the number of times a shape fits into itself
* State the geometric properties that can be used to distinguish shapes.

**SKILLLS*** Select appropriate geometrical instruments to construct triangles , rectangles ( including squares) parallelograms , trapezia and rhombi and examine their properties
* Distinguish different 2D shapes using their properties
* Identify triangles and special quadrilaterals in everyday situations
* Determine the symmetrical properties of 2D shapes

**ATTITUDES AND VALUES*** Appreciate the use of properties to distinguish shapes
* Recognize that special quadrilaterals are subset of all quadrilaterals

**KEY UNIT COMPETENCE**To be able to use geometric properties, including symmetry , to sort shapes | Math game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools Page (145-156)A ruler, protractor, variety of paper/ card shapes for sorting and exploring symmetry , and computers for sorting special quadrilaterals |  |
| **WEEK 8****05-09/06/2023** | UNIT 16Area of 2D shapes | **LESSON: 1**Area of a triangle ( 2)**LESSON :2**Area of a quadrilateral ( 3 period)Area of a quadrilateral ( 4 period)**LESSON :3** Area of shapes that can be related to rectangle ( 3)Area of shapes that can be related to rectangle ( 2)**LESSON: 4** Summative evaluation(1) | **KNOWLEDGE AND UNDERSTANDING*** Explain area as the space enclosed by a perimeter
* Distinguish the area and perimeter
* Select the correct unit to use

**SKILLS*** Practically determine the area of triangle and quadrilaterals by relating them to the area of rectangles
* Solve problems involving determination of the area of different 2D shapes

**ATTITUDES AND VALUES*** Appreciate that the relationship between area and perimeter is simple.

**KEY UNIT COMPETENCE**To use rectangles to determine the area of triangles and special quadrilaterals | Maths game, demonstration, group work, individual work , brain storming , question and answer methodEvaluation procedures: written: general test of open and closed questions | Primary learner’s mathematics for Rwandan schools Page (146-175)Ruler, paper shapes, squared paper ,scissors , and glue |  |
| **WEEK 9****12-16/06/2023** | UNIT 17Elementary statistics | **LESSON: 1**Data collection using tables(2)**LESSON : 2**Quantitative and qualitative data ( 2)**LESSON : 3**Interpreting and extracting information from tables and bar graphs ( 2)**LESSON :4**Representing information using tables and bar graphs ( 2)**LESSON: 5**Summative evaluation (1) | **KNOWLEDGE AND UNDERSTANDING*** Explain how data are collected using tables
* Differentiate between quantitative and qualitative data
* Explain the process of interpreting and extracting information from tables
* Describe how to represent information using tables and bar graphs

**SKILLS*** Analyze and describe the possible ways data is collected
* Apply the knowledge acquired to distinguish between quantitative and qualitative data
* Solve mathematical problems involving interpretation and extraction of information from tables in daily life
* Explain different ways of representing data
* Solve mathematical problems involving representation of data in daily life

**ATTITDES AND VALUES*** Appreciate the importance of data collection in daily life situations
* Appreciate the importance of interpreting and extracting information from tables
* Appreciate the importance of statistics tables and bar graphs in daily life situations

**KEY UNIT COMPETENCE**To be able to collect, represent and interpret data | Primary learner’s mathematics for Rwandan schools Page(176-182)Maths game, demonstration, group work, individual work , brain storming , question and answer methodobservationEvaluation procedures: written: general test of open and closed questions | Manila paper, scissors, tape measure, rulers, glue, masking tapes, and weighing machines. |  |

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| **WEEK 10****19-23/07/2023** | UNIT 18Introduction to probability | **LESSON: 1**Play games of chance , and decide whether or not they are fair( 2 period)**LESSON :2**Summative evaluationGeneral revision  | **KNOWLEDGE AND UNDERSTANDING*** Know and explain that games have rules and may or may not be fair

**SKILLS*** TO take turns when playing games of chance involving coins, dice, and cards
* To decide whether or not a game is fair

**ATTITUDE AND VALUES*** Appreciate the importance of following rules and taking turns when playing games

**KEY UNIT COMPETENCE**Play games of chance and decide whether or not they are fair | Primary learner’s mathematics for Rwandan schools Page (138-185)Math game, demonstration, group work, individual work , brain storming , question and answer methodobservationEvaluation procedures: written: general test of open and closed questions | Various games, coins, dice, and cards |  |

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| **WEEK 11****26-30/06/2023** |  **GENERAL REVISION** |
| **WEEK 12****03-07/07/2023** | **EXAMINATION**  |
| **WEEK 13****10-14/07/2023** | **CORRECTION** |
| **WEEK 14****17-19/07/2023** |  **PNLE** |