**MATHEMATICS SCHEMEE OF WORK**

**STANDARD 5, 2017**

**Presented by Schools Net Kenya (SNK) | P.O. Box 8076 – 00200, Nairobi**

**Coordinated by KENPRO, Macjo Arcade, 4th Floor, Suite 15E, Osiligi House,Ground Floor**

**Off Magadi Road, Ongata Rongai |Tel: +254202319748 | +254 711 88 22 27**

**Website:** [**www.schoolsnetkenya.com**](http://www.schoolsnetkenya.com/)

 **E-mail:** **infosnkenya@gmail.com**

**PRIMARY MATHEMATICS PUPILS BOOK 5**

**TERM 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **WEEK** | **LESSON** | **TOPIC AND SUB-TOPICS** | **OBJECTIVES** | **TEACHING AND LEARNING ACTIVITIES** | **TEACHING AIDS** | **REFERENCES** | **REM** |
|  |
| **1** | **Term I Opening and Revision** |  |
| **2** | 1 & 2 | **NUMBERS UP TO 999 999**Numbers | By the end of the lesson learners should be able to:Read and write numbers not exceeding 99999Recognize place value of up to tens of thousands. | * The teacher will write a number on the chalk board.
* Let learners identify the place value of the digits in the number.
* Reading numbers aloud.
* Exercises
 | Chalk board, Exercise books | Primary mathematics Pupils book 5 pg. 1.Teachers Guide pps bk. 5 pg. 2 |  |
| 3. | Numbers up to hundred thousands | By the end of the lesson learners should be able to:Read and write numbers up to hundred thousands in symbols and in words. | * Revise the activity which number comes after a given number.
* Discuss frame on pupils book pg. 2 to introduce hundred thousand.
* 3. Learners to do exercise on pps book pg. 2
 | Frame on pupils book 5 page 2. | Primary mathematics Pupils book 5 pg. 2Teachers guide page 3. |  |
| 4. | Place value of up to hundreds of thousands. | By the end of the lesson learners should be able to:Recognize and identify place value of up to hundreds of thousand. | * Say any number up to 99999
* Let others write the place value of the digits in the number.
* Repeat place value
* Discussion on the difference between place value and total value.
* Working out exercise.
 | Frame on pupils book page 4 | Primary mathematics Pupils book 5 pg. 4 to 6.Teachers guide page 5 to 6 |  |
| 5 | Total value of up to 999,999 | By the end of the lesson learners should be able to:Recognize total value of the digits in the numbers up to 999,999 | * Repeat place value.
* Discussion on the difference between place value and total value.
* Working out exercise.
 | Chalk board Frame | Primary mathematics Pupils book 5 pg. 6.Teachers book page 6. |  |
|  | 6 &7 | Rounding off numbers to the nearest 10 and 100 | By the end of the lesson learners should be able to:Round off numbers to the nearest 10 and 100 | * Teacher to chose any two digit number and let the class decide to which ten the number is nearest to.
* Teacher will lead the class to generalize how to write numbers to the nearest 10
 | Learners Chalkboard Frame on pupils book page 7. | Primary mathematics Pupils book 5 pg. 7 and 8.Teacher’s guide page 7 and 8 |  |
| **3** | 1 &2 | **OPERATION ON WHOLE NUMBERS** Addition | By the end of the lesson learners should be able to:Add numbers up to 999,999. | * Revise addition with and without carrying.
* Working out examples.
* Stressing on correct alignment of numbers according to place value.
 | Pupils booksFrame | Primary mathematics Pupils book 5 pg. . 9, 10 and 11 Teachers guide bk 5 pg. 10 and 11 |  |
| 3&4 | Subtraction | By the end of the lesson learners should be able to:Subtract up to 6 digits | * Stress on correct alignment.
* Skill involving borrowing .
* Reading questions correctly.
 | Frame on pupils book 5 page 12. | Primary mathematics Pupils book 5 pg. 12 and 13Teachers guide pge 12 and 13 |  |
| 5. | Multiplication | By the end of the lesson learners should be able to:Multiply by 2 digit numbers by rounding off. | * Revision of rounding off
* Demonstration
* Exercise
 | Frame on page 13 | Primary mathematics Pupils book 5 pg. 14Tr.Guide PG 13 - 14 |  |
| 6 | Multiplication | By the end of the lesson learners should be able to:Multiply up to 3 single digit number | * Brain storm questions
* Explanation
* Exercise
 | Frame on page15 | Primary mathematics Pupils book 5 pg. . 15Teachers guide pg. 15 |  |
| 7 | Multiplication | By the end of the lesson learners should be able to:Multiply numbers by up to 2 digit numbers | * Discussion
* Exercises
 | Frame on page 16 and 17 | Tr. Guide pg 16Primary maths ,.Pupils bk pg 16 - 17 |  |
| **4** | 123&d456 &7 | DivisionBy multiples of 10Divide a 4 digit number by up to a 2 digit number with and without carrying.**NUMBERS**RevisionOdd and even numbersDivisibility tests of 3, 4, 6 and 9 | By the end of the lesson learners should be able to:Divide by multiples of 10Tell the number of digits in the quotient i.e answer or the result given the divisor or divided.By the end of the lesson learners should be able to:Identify even and odd numbers in revision exercisesBy the end of the lesson learners should be able to:Recognise numbers divisible by 3, 4, 6 and 9. | * Explanation
* Saying multiplication tables
* Demonstration
* Doing exercises
* Let learners identify odd and even numbers
* Working out exercise on page 21 and 22
* Revise tests for 2, 5 and 10.
* Explanation and demonstration
* Doing exercise on pg. 23 and 24.
 | Frames on pupils book pg 19 – 20Chalkboard LearnersFrames on pages 23 and 24 | Primary mathematics Pupils book 5 pg. 17 – 20Teachers guide book pages 17 – 20Pupils book pages 21 – 22Tr. Guide pg. 21 – 22Primary mathematics Pupils book 5 pg. 23 – 25 Tr. Guide page 24 - 25 |  |
| **5** | 1 &2 | Prime numbers  | By the end of the lesson learners should be able to:dentify prime numbers | * Explain what is a prime number
* Demonstration
 | Chart 3Table on pg. 27 |  |  |
| 3, 4&5 | Prime factors | By the end of the lesson learners should be able to:List factors and prime factors of numbers | * Revise factors by expressing numbers as a product of 2 factors
* Introduce factor tree method
 | Frame on page 28 | Primary mathematics Pupils book 5 pg. . 29 - 31 |  |
| 6&7 | Divisors, common divisors and greatest common divisors | By the end of the lesson learners should be able to:Find divisors, common divisors and greatest common divisors | * Examples
* Discussion
 |  |  |  |
| **6** | 1, 2, 3 | Multiples, common multiples, and least common multiples (L.C.M) | By the end of the lesson learners should be able to:Find multiples, identify common multiples and least common multiples  | * Revise through examples what the multiple of a number is.
* Listing examples and circling the common multiples.
* Pick the least but common multiple.
 | Chart 5 | Primary mathematics Pupils book 5 pg. 32 and 33Teacher’s guide pg. 31 - 33  |  |
| 4 | patterns | By the end of the lesson learners should be able to:Recognize and identify patterns involving even, odd and prime numbers  | * Discussion
* Explanation
 |  | Primary mathematics Pupils book 5 pg. 34 |  |
| 5&6 | Roman numbers | By the end of the lesson learners should be able to:Recognize, read, and write numbers one to fifty in roman numerals | * Teacher to introduce I, V, X, L
* Developing the technique of writing the numbers one to ten.
* Exercises
 | Frame on pupils book page 35 | Primary mathematics Pupils book 5 pg. 35 – 36Teacher’s guide page 34 - 35 |  |
| 7 | **FRACTIONS**Simplifying fractions | By the end of the lesson learners should be able to:Give fractions in their simplest forms | * Demonstration
* Exercise
 |  | Pupils book page 37 - 38 |  |
| 7 | Mid – Term 1 exams and Break |  |
| **8** | 1 | Simplifying by cancellation | By the end of the lesson learners should be able to:Simplify fractions by cancelling  | * Demonstration
* Exercise
 | Frames on pupils book page 38 | Primary mathematics Pupils book 5 pg. 38 Teacher’s guide pg 38 |  |
|  | 2 &3 | Conversion of improper fractions into mixed numbers and vise versa | By the end of the lesson learners should be able to:Convert fractions into improper fraction and vise versa | * Demonstration
* Work out exercise
 | Frame on page 40 | Primary mathematics Pupils book 5 pg. 39, 40,41 |  |
|  | 4 &5 | Compare and order fractions | By the end of the lesson learners should be able to:Compare and order fractions | * Explanation
* Working out
 | Frame | Primary mathematics Pupils book 5 pg. 41 - 42 |  |
|  | 6, 7& 1 | Addition and subtraction with renaming | By the end of the lesson learners should be able to:Add and subtract fractions with renaming | * Explanations
 | Frame | Page 43 - 45 |  |
| 5, 6& 7 | Addition and subtraction of mixed numbers using L. C. M | By the end of the lesson learners should be able to:Add and subtract numbers using L.C.M | * Demonstration
* Explanation
* Discussion
* Working out exercise
 | Frames on pages 49 and 50 | Primary mathematics Pupils book 5 pg. 49, 50 and 51Teachers guide pages 47 - 49 |  |
| **9** | 1&2 | Multiplication | By the end of the lesson learners should be able to:Multiply whole numbers by fractions and vise versaMultiply whole numbers by mixed numbers and vise versa | * Explanation
* Discussion
 | Frame on page 52 | Primary mathematics Pupils book 5 pg. 52Tr.s guide page 50 - 51 |  |
| 3 | **LENGTH, PERIMETER AND AREA**length | By the end of the lesson learners should be able to:Estimate then measure the lengths of various objects to the nearest cm and m | * Estimation
* Explanation
* Exercise
 | Table on teacher’s guide page 54 | Trs. Guide page 54 |  |
| 4 | length | By the end of the lesson learners should be able to:Estimate distance in meters | * Estimating
 | Rulers | Primary maths bk. 5 |  |
| 5&6 | Length | By the end of the lesson learners should be able to:Recognize the km as a unit of measurementConvert cm to m and vise versaConvert m to km and vise versa | * Estimation
* Conversion of units
* Discussion
* Exercises
 | Frame on pupils book page 56 | Primary maths bk. 5 |  |
| 7 | **REVISION** | By the end of the lesson learners should be able to:Complete the exercise | * Revision
 | Pupils | Primary mathematics Pupils book  |  |
| **10** | 1 | Addition | By the end of the lesson learners should be able to:Convert cm into m and m into km involving carrying | * Revision
* Diagnostic tests
 |  |  |  |
|  | 2 | Subtraction | By the end of the lesson learners should be able to:Convert cm into m and m into km involving borrowing | * Revision
* Diagnostic tests
* Addition
* Discussion
* Subtraction
* Multiplication
* Division
 | Frame on pupils book page 58, 59, 62, 63 and 64 | Primary mathematics Pupils book 5 pg. 58 - 64 |  |
| 3 | Multiplication | By the end of the lesson learners should be able to:Convert cm into m and m into km involving carrying |  |
| 4& 5 | division | By the end of the lesson learners should be able to:Convert cm into m and m into km involving carrying |  |
| 6&7 | Perimeter of rectangles and squares | By the end of the lesson learners should be able to:Find perimeter of rectangles and squares using formula P=2(L+W) and P=4S | * Revision
* Doing exercise
 | Frame on page 65Chalk board | Primary mathematics Pupils book 5 pg. 65 and 66 |  |
| **11** | 1&2 | Area of rectangles and squares  | By the end of the lesson learners should be able to:Find areas of rectangles and squares using the formula L\*W and S\*S | * Revision
* Demonstration
 | Frame on page 67 | Primary maths bk. 5Pupils book page 67 - 68 |  |
| 3 | Area of a right- angled triangle | By the end of the lesson learners should be able to:Find the area of a right angled triangle | * Explanation
* Demonstration
* Exercises
 | Rectangular cut-outsWord diagonal | Primary mathematics Pupils book 5 pg. 69Tr.s guide page 64  |  |
| 4 &5 | Length / width given area of one side | By the end of the lesson learners should be able to:Find the length or width when the area and either length or width is given | * Demonstration
* Explanation
 |  | Tr.s guide page 65 |  |
| 6&7 | **DECIMALS** | By the end of the lesson learners should be able to:Identify thousandthsConvert thousandths into decimals and vise versa | * Explanations
* Demonstrations
 | Place value chart (chart 6) | Primary mathematics Pupils book 5 pg. 71 – 72Trs. Page 67 - 68 |  |
| 12 | 1&2 | Conversion of fractions to decimals | By the end of the lesson learners should be able to:Convert tenths and hundredths into decimals and vise versa | * Speed tests
* Mental work
* Demonstrations
 |  | Primary mathematics Pupils book 5 pg. 73 and 74 |  |
| 3&4 | Addition and subtraction of decimals | By the end of the lesson learners should be able to:Add and subtract up to 3 decimal places | * Stress proper alignment and proper procedure for adding or subtracting
 |  | Primary mathematics Pupils book 5 pg. . 5Page 74 and 75 |  |
| 5&6 | Multiplication |  |  |  |  |  |
| 7 | Estimating time by shadows | By the end of the lesson learners should be able to:Estimate time by shadow reading  | * Fixing a pole on ground
* Observation
* Recording
 | A 2cm poleSeveral pegs | Primary maths bk. 5 |  |
| 13 | Revision and Preparation for End Term 1 Exam |  |
| 14 | End Term 1 Exams and Closing |  |
|  | TERM 2 |  |
| **WEEK** | **LESSON** | **TOPIC AND SUB-TOPICS** | **OBJECTIVES** | **TEACHING AND LEARNING ACTIVITIES** | **TEACHING AIDS** | **REFERENCES** | **REM** |
|  |
| 1 | **Term 2 Opening and Revision** |  |
|  | 6&7 | **DECIMALS** | By the end of the lesson learners should be able to:Identify thousandthsConvert thousandths into decimals and vise versa | * Explanations
* Demonstrations
 | Place value chart (chart 6) | Primary mathematics Pupils book 5 pg. 71 – 72Trs. Page 67 - 68 |  |
| 2 | 1&2 | Place value up to thousandths | By the end of the lesson learners should be able to:Identify thousandthsConvert thousandths into decimals and vise versa | * Explanations
* Demonstrations
 | Place value chart (chart 6) | Primary mathematics Pupils book 5 pg. 71 – 72Trs. Page 67 - 68 |  |
| 2 | 3&4 | Conversion of fractions to decimals | By the end of the lesson learners should be able to:Convert tenths and hundredths into decimals and vise versa | * Speed tests
* Mental work
* Demonstrations
 |  | Primary mathematics Pupils book 5 pg. 73 and 74 |  |
|  | 5 | Conversion of decimals to fractions | By the end of the lesson learners should be able to:Convert tenths and hundredths into decimals and vise versa | * Speed tests
* Mental work
* Demonstrations
 |  | Primary mathematics Pupils book 5 pg. 73 and 74 |  |
|  | 6 | Addition and subtraction of decimals | By the end of the lesson learners should be able to:Add and subtract up to 3 decimal places | * Stress proper alignment and proper procedure for adding or subtracting
 |  | Primary mathematics Pupils book 5 pg. 74 and 75 |  |
|  | 7 | Multiplications of decimals bywhole numbers | By the end of the lesson learners should be able to:Add and subtract up to 3 decimal places | * Stress proper alignment and proper procedure for adding or subtracting
 |  | Primary mathematics Pupils book 5 pg. 74 and 75 |  |
| 3 | 1 | **TIME** Estimating time by length of shadows | By the end of the lesson learners should be able to:Estimate time by shadow reading  | * Fixing a pole on ground
* Observation
* Recording
 | A 2cm poleSeveral pegs | Primary mathematics Pupils book 5 pg.  |  |
|  | 2&3 | Tell and write time in hours and minutes | By the end of the lesson learners should be able to:Tell and write time in hours and minutes | * Telling time
 | A clock face | Primary mathematics Pupils book 5 pg.  |  |
|  | 4 | Time in am and pm | By the end of the lesson learners should be able to:Read, tell and write down time IN am and pm in solving problems on time | * Explanation
* Discussion
 | Chart 7Clock face | Primary mathematics Pupils book 5 pg. 79 – 83Trs. Guide page 77 - 79 |  |
| 5&6 | **REVISION** | By the end of the lesson learners should be able to:Convert hours into minutes and vise versa | * Revision
 | Pupils | Primary mathematics Pupils book 5 pg. 84 |  |
| 7 | Time in seconds | By the end of the lesson learners should be able to:Use the second as a unit of time | Discussion | Clock face with a second hand | Primary mathematics Pupils book 5 pg. 85 |  |
| 4 | 1 | Addition involvingtime in hours, minutes and seconds  | By the end of the lesson learners should be able to:Add hours, minutes and seconds | * Explanation
* Solving problems on addition from the page
 | Frame on page 86 and 87 | Primary mathematics Pupils book 5 pg. 86 - 89 |  |
|  | 2&3 | subtraction involvingtime in hours, minutes and seconds | By the end of the lesson learners should be able to:Subtract hours, minutes and seconds | * Explanation
* Solving problems on subtraction from the page
 | Frame on page 88 | Primary mathematics Pupils book 5 pg. 87-88 |  |
|  | 4 | Calculate Periods between given times | By the end of the lesson learners should be able to:Calculate Periods between given times | * Discussing Frame B in the pupil’s book pg 88
* Explanations
 | Frame on page 89 | Primary mathematics Pupils book 5 pg. 88,89 & 90 |  |
|  | 5&6 | Tell, write and solve problems involving time using a.m and p.m | By the end of the lesson learners should be able to:Tell, write and solve problems involving time using a.m and p.m | * Orally revise reading and writing time to the nearest minute in short and long forms using a clock-face
 | Frame on page 91 | Primary mathematics Pupils book 5 pg. 90-91 |  |
|  | 7 | Multiply and divide hours, minutes and seconds | By the end of the lesson learners should be able to:Multiply and divide hours, minutes and seconds | * Multiplication with propoer carrying
* Solving problems of division in pg 93
 | Chart 7,Clock face | Primary mathematics Pupils book 5 pg. 91-93 |  |
| 5 | 1&2 | ALGEBRAAdd and subtract Like and Unlike terms | By the end of the lesson learners should be able to:Collect and add like terms of given algebraic expressionAdd and subtract Like and Unlike terms | * Collect and add like terms of given algebraic expression
* Add and subtract Like and Unlike terms
 | Chart 7,Clock Frame on page 94 | Primary mathematics Pupils book 5 pg94-96 |  |
|  | 3 | Solving Equations | By the end of the lesson learners should be able to:Solving Equations | * Solve simple Equations involving addition and subtraction
 | Beam balance, weights, objects of equal weights e.g. wooden blocks | Primary mathematics Pupils book 5 pg. 97 |  |
|  | 4 | Finding the Value of the unknown | By the end of the lesson learners should be able to:Finding the Value of the unknown | Solving problems to find the value of the unknown on pg. 98 | Chart 7,Clock | Primary mathematics Pupils book 5 pg. 98 |  |
|  | 5 | **REVISION** | By the end of the lesson learners should be able to:Complete a revision exercise | * Revision EXERCISE
 | Pupils | Primary mathematics Pupils book 5  |  |
|  | 6&7 | **GEOMETRY****Measuring Angles** | By the end of the lesson learners should be able to:**Measure Angles** | * Use a unit measure to measure angels
 | Unit angle cut-outs (10o) hard paper | Primary mathematics Pupils book 5 pg. 99-115 |  |
| 6 | 1&2 | Unit angle and half disc | By the end of the lesson learners should be able to:Measuring unit angles | * Measuring unit angles
* Marking unit angles
* Using half disc to measure angles on pg.11-
 | Hard paper | Primary mathematics Pupils book 5 pg. 100 |  |
|  | 3 | The protractor | By the end of the lesson learners should be able to:Identify the scales on the protractor and use the protractor to measure angels | * Discussions
* Demonstrations on how to use a protractor
* Revise the naming of angles
 | Half disc, protractors, chart 2 | Primary mathematics Pupils book 5 pg.101 |  |
|  | 4&5 | The reflex angle | By the end of the lesson learners should be able to:recognize and identify reflexangles | * Measuring angels
* Discussions
 | Protractors | Primary mathematics Pupils book 5 pg. 102-104 |  |
|  | 6 | Angles on a straight linePerpendicular lines | By the end of the lesson learners should be able to:Recognize and identify angles On a straight lineRecognize and identifyPerpendicular lines | * Measuring angels
* Discussions
 |  | Primary mathematics Pupils book 5 pg. 105 |  |
|  | 7 | **REVISION** | By the end of the lesson learners should be able to:Complete a revision exercise | * Revision EXERCISE
 | Pupils | Primary mathematics Pupils book 5  |  |
| 7 | Mid Term 2 Exams and Break |  |
| 8 | 1&2 | Sum of angles of a triangle | By the end of the lesson learners should be able to:Work out problems involving Sum of angles of a triangle | * Drawing triangles and measure their angles
* Adding angels of a triangle
 | Pieces of paper, protractor, a pair of scissors | Primary mathematics Pupils book 5 pg. 106-107 |  |
|  | 3 |  | By the end of the lesson learners should be able to:Work out problems involving Sum of angles of a triangle  | * Drawing triangles and measure their angles
* Adding angels of a triangle
 |  | Primary mathematics Pupils book 5 pg.108-109 |  |
|  | 4 | Right-angled Triangle | By the end of the lesson learners should be able to:state the properties of right angle | * Drawing right angles
* Discussions
* Explanations
 | Ruler | Primary mathematics Pupils book 5 pg. 109-110 |  |
|  | 5&6 | isosceles Triangle | By the end of the lesson learners should be able to: | * Filling of blanks in frame (i) and (ii) pg. 111
* Identifying angles and sides
* Identifying isosceles triangles
 | Rulers, protractors, dividers | Primary mathematics Pupils book 5 pg. 111-113 |  |
|  | 7 | Equilateral triangles | By the end of the lesson learners should be able to:draw right-angled andequilateral triangles using aruler and a protractor | * Identifying angles and sides
* Identifying equilateral triangles
 | Rulers, protractors, dividers | Primary mathematics Pupils book 5 pg. 114-116 |  |
| 9 | 1&2 | **MASS**The gram as a unit of measuringmass | By the end of the lesson learners should be able to:recognize and identify the gramas a unit of measuring mass | * Revise the kilogram by naming objects that are weighed in 1 kg,1/2kg and ¼ kg
* Exercise on pg 116
* Exercise on pg 117 and 118
 | Beam balance,items to weigh which are lighter than a kilogram e.g packets of tea leaves,salt,sand | Primary mathematics Pupils book 5 pg.116-118 |  |
|  | 3 | Conversion of kilograms to gramsand vice versa | By the end of the lesson learners should be able to:Convert kilograms to gramsand vice versa | * Converting of grams to kilograms
* Discussions
* Explanations
 | Pieces of paper,  | Primary mathematics Pupils book 5 pg. 119-120 |  |
|  | 4&5 | Addition and subtraction involvingmass in kilograms and grams | By the end of the lesson learners should be able to:Add and subtraction mass in kilograms and grams | * Using frames on pages 121,122,123 and 124 to show addition, subtraction, multiplication and division involving mass in kg and g
* Exercise
 | Beam balance, items to weigh which are lighter than a kilogram | Primary mathematics Pupils book 5 pg. 121-124 |  |
|  | 6 | Multiplication involving mass inkilograms and grams | By the end of the lesson learners should be able to:Multiply mass in kilograms and grams | * Using frames on pages 121,122,123 and 124 to show addition, subtraction, multiplication and division involving mass in kg and g
* Exercise
 | Beam balance, items to weigh which are lighter than a kilogram | Primary mathematics Pupils book 5 123 |  |
|  | 7 | Division involving mass inkilograms and grams by wholenumbers | By the end of the lesson learners should be able to:Divide mass in kilograms and grams | * Using frames on pages 121,122,123 and 124 to show addition, subtraction, multiplication and division involving mass in kg and g
* Exercise
 | Beam balance, items to weigh which are lighter than a kilogram | Primary mathematics Pupils book 5 124 |  |
| 10 | 1&2 | **MONEY AND POSTAL CHARGES****Money** | By the end of the lesson learners should be able to:Add, subtract, multiply and divide in problems involving money | * Revising operations involving money in (sh and cts)
* Work on page 125,126and 127
 | Price list of common items in a shop | Primary mathematics Pupils book 5 pg. 125-127 |  |
|  | 3 |  | By the end of the lesson learners should be able to:Carry out shopping activitiesMake a list of items bought, stating the cost for each item and total cost | * Preparing a list of items bought and getting a total amount paid
* Practicing shopping in groups using class dukas
 | Shop keeper’s price list (Make your own chart),imitation money (coins and notes) | Primary mathematics Pupils book 5 pg. 128 |  |
|  | 4&5 |  | By the end of the lesson learners should be able to:Write down and calculate cost on a billUse the symbol @ when writing out a bill | * Preparing a list of items bought and getting a total amount paid
* Practicing shopping in groups using class dukas
 | Shop keeper’s price list | Primary mathematics Pupils book 5 pg.129-130 |  |
|  | 6 |  | By the end of the lesson learners should be able to:Solve problems involving inland postage charge for letters and parcels | * Discussing functions of the post office
* Discuss postal charges
* Work on page 131 and 132
 |  | Primary mathematics Pupils book 5 pg. 131-132 |  |
|  | 7 | **REVISION** | By the end of the lesson learners should be able to:Complete a revision exercise | * Revision EXERCISE
 | Pupils | Primary mathematics Pupils book 5  |  |
| 11 | 1 | **GEOMETRY****Perpendicular Lines** | By the end of the lesson learners should be able to:Recognize and identify perpendicular lines | * Draw perpendicular Lines
* Discuss the frame on pag 133
* Exercise
 | Protractor, ruler and pencil | Primary mathematics Pupils book 5 133 |  |
|  | 2 | Right –angled Triangle | By the end of the lesson learners should be able to:Draw right angled triangle using protractor and ruler only | * Drawing a right angle using a protractor
* Exercise
 | Protractor, ruler and pencil | Primary mathematics Pupils book 5 pg. 134 |  |
|  | 3&4 | Equilateral TriangleParallel Lines | By the end of the lesson learners should be able to:Draw equilateral triangles using ruler and protractor only | * Discuss how to draw an angles
* Exercise
* Drawing parallel lines
* Discussions
* Exercise
 | Protractor, ruler and pencil | Primary mathematics Pupils book 5 pg. 135-137 |  |
|  | 5 |  | By the end of the lesson learners should be able to:Construct parallel lines using a ruler and a set square only | * Demonstration on how to construct parallel lines
* Construction of parallel lines
 | Protractor, ruler and pencil | Primary mathematics Pupils book 5 pg. 138 |  |
|  | 6&7 |  | By the end of the lesson learners should be able to:Identify by measuring that the opposite sides of a rectangular are equal and parallel  | * Revising parallel lines and sides
* Discussions
* Exercise
 | Rectangular sheets of paper | Primary mathematics Pupils book 5 pg. 139-140 |  |
| 12 | 1 | Revision | By the end of the lesson learners should be able to:Answer revision questions on Geometry | * Revising on geometry
* Discussions
* Exercise
 |  | Primary mathematics Pupils book 5 141-142 |  |
|  | 2 | Patterns | By the end of the lesson learners should be able to:Make patterns involving triangles, rectangles and square | * Drawing patterns
* Discussions and participations
 |  | Primary mathematics Pupils book 5 pg. 143 |  |
|  | 3 | VOLUME AND CAPACITYVolume | By the end of the lesson learners should be able to:Find the number of cubes in a stack by multiplication in revision lesson | * Arranging cubes or cuboids
* Exercise
 | Cubes or Cuboids | Primary mathematics Pupils book 5 pg. 144 |  |
|  | 4&5 |  | By the end of the lesson learners should be able to:Recognize and identify the cubic centimeter (cm3) as a unit of measuring volumeWork out volume of cubes and cuboids using the formula (v=1xwxh) | * Arranging cubes or cuboids
* Exercise
 | Centimeter cubes | Primary mathematics Pupils book 5 145-146 |  |
|  | 6&7 | CapacityEstimating and measuring in ml.Addition, Subtraction, Multiplication involving liters ½ litres,1/4 liters and milliliters | By the end of the lesson learners should be able to:Recognize and identify the milliliters (ml) as a unit of measuring capacityEstimate and measure capacity in milliliters | * Estimate and measure capacity of different containers
* Group work
* Exercise
 |  | Primary mathematics Pupils book 5 pg. 147-150 |  |
| 13 | Revision and Preparation for End Term 2 Exams |  |
| 14 | End Term 2 Exams and Closing |  |
|  | TERM 3 |  |
| **WEEK** | **LESSON** | **TOPIC AND SUB-TOPICS** | **OBJECTIVES** | **TEACHING AND LEARNING ACTIVITIES** | **TEACHING AIDS** | **REFERENCES** | **REM** |
|  |
| 1 | Term 3 Opening and Revisions |  |
| 2 | 1&2 | **SCALE DRAWING** | By the end of the lesson learners should be able to:Represent given length on paper by drawing them to a given scale 1cm represents 10cm | * Measuring Lengths
* Exercise
 | Metre rule and rulers | Primary mathematics Pupils book 5 151-152 |  |
|  | 3 |  | By the end of the lesson learners should be able to:Represent given lengths using the scale 1cm represents 10cm | * Converting actual measurements into scale measurements
* Discussions
 | Meter rule and rulers | Primary mathematics Pupils book 5 pg153 |  |
|  | 4&5 |  | By the end of the lesson learners should be able to:Calculate actual lengths given a scale drawing and the scale used | * Explaining how to get actual measurements from the scale
* Discussions and exercise
 | Meter rule and rulers | Primary mathematics Pupils book 5 pg154-155 |  |
|  | 5,6&7 | Evaluation Exercise and Revision | By the end of the lesson learners should be able to:Complete Evaluation Exercise and Revision | * Revision
* Discussions
* Exercise
 | Meter rule and rulers | Primary mathematics Pupils book 5  |  |
| 3 | 1&2 | TABLES AND GRAPHS | By the end of the lesson learners should be able to:Collect and record data involving events familiar to the learners | * Discussing how to cvollect and record data
* Collecting data
* Explaining data collection
 | Bottle tops, pebbles (small stones sticks, fairly large tins) | Primary mathematics Pupils book 5 none |  |
|  | 3 |  | By the end of the lesson learners should be able to:Collect and record data on tables | * Discussing how many children the learners are in their fami.ly
* Preparing tables to show collecting and recording g data
 | Bottle tops, pebbles (small stones sticks, fairly large tins) | Primary mathematics Pupils book 5 pg.one |  |
|  | 4&5 |  | By the end of the lesson learners should be able to:Represent data using block graphs | * Discussing how many children the learners are in their fami.ly
* Preparing tables to show collecting and recording g data
 | A number of uniform blocks,(empty matchboxes),squared paper, paper stripes marked at 5cm intervals | Primary mathematics Pupils book 5 pg. 156 |  |
|  | 6 |  | By the end of the lesson learners should be able to:Represent data in graphs | * Revise collection and recording data
* Representing data on scales and graphs
 | Tables in pupils book pg.157-163 | Primary mathematics Pupils book 5 157-160 |  |
|  | 7 |  | By the end of the lesson learners should be able to:Represent data in graphs | * Revise collection and recording data
* Representing data on scales and graphs
 | Tables in pupils book pg.157-163 | Primary mathematics Pupils book 5 157-163 |  |
| 4 |  | Revision Exercise | By the end of the lesson learners should be able to:Complete the given exercises | * Evaluation Exercises
* Discussions
* Explanations
 | - | Primary mathematics Pupils book 5  |  |
| 5&6 | 1&2 | MIXED EXERCISESExercise 1 | By the end of the lesson learners should be able to:Complete the exercises given | * Evaluation Exercises
 |  | Primary mathematics Pupils book 5 164-186 |  |
| 7 |  | CHARTS | By the end of the lesson learners should be able to:Familiarize with the Charts given | * Drawing Charts
* Discussing Charts
* Explaining Charts
 | Charts in the Teacher’s guide pg.171-175. | Teacher’s guide pg.171-175 |  |
| 8 | Revision and preparations for End Term 3 Exams |  |
| 9 | End Term 3 Exams and Closing |  |