**2024 GRADE 7 MENTOR MATHEMATICS SCHEMES OF WORK TERM 1**

TEACHER’S NAME……………………………. SCHOOL ……………………………..TERM…………… YEAR ……..

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| ***Week*** | ***Lesson*** | ***Strand***  | ***Sub-Strand***  | ***Specific Learning Outcomes***  | ***Learning/ Teaching Experiences*** | ***Key Inquiry Questions***  | ***Learning Resources***  | ***Assessment Methods***  | ***Ref***  |
| 1 | 1 | ***NUMBERS***  | Whole Numbers Place value  | By the end of the lesson, the learner should be able to:1. Identify the place value of different digits on a place value chart
2. Use a place value chart to show the place value of different digits
3. Appreciate the place value chart in showing the place value of whole numbers
 | Learners are guided in pairs, in groups or individually to: Identify the place value of different digits on a place value chartUse a place value chart to show the place value of different digitsUse the abacus to show the place value of digit 2 in the number Work out practice exercise 1  | What is the place value of digit 1 in each number?  | Place value apparatus Number charts Numbercards Multiplication tables**References** ***Mentor Mathematics Learner’s Book Grade 7 pg. 1-3*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Whole Numbers Total value  | By the end of the lesson, the learner should be able to:1. Identify the total value of various digits
2. Make number cards and use them to identifying the total value of digits in a place value chart
3. Appreciate the use of number cards to identify the total value of digits on a place value chart
 | Learners are guided in pairs, in groups or individually to: Identify the total value of various digitsMake number cards and use them to identifying the total value of digits in a place value chart Use the abacus to find the total value of digit 7 in the number Work out practise exercise 2 | What is the total value of each digit in the numbers 35708462?  | Place value apparatus Number charts Numbercards Multiplication tables**References** **Mentor Mathematics Learner’s Book Grade 7 pg. 3-5** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Whole Numbers Reading and writing numbers in symbols  | By the end of the lesson, the learner should be able to:1. Read numbers in symbols
2. Write numbers in symbols
3. Apply operations of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Read numbers in symbols Write numbers in symbols Work out practice exercise 3 | Can you give examples of numbers in symbols?  | Place value apparatus Number charts **References** **Mentor Mathematics Learner’s Book Grade 7 pg. 5-6** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Whole Numbers Reading and writing numbers in words | By the end of the lesson, the learner should be able to:1. Read and write numbers in symbols
2. Practice writing dummy cheques for different sums of money
3. Apply operations of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Read and write numbers in symbols Practice writing dummy cheques for different sums of money Write the amount of money spent in wordsWork out practice exercise 4 | What are the features of a cheque?  | Place value apparatus Number charts Numbercards **References** ***Mentor Mathematics Learner’s Book Grade 7 pg. 6-8*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Whole Numbers Rounding off numbers up to the nearest millions  | By the end of the lesson, the learner should be able to:1. Identify the place value of different numbers in millions
2. Round off numbers up to the nearest millions
3. Enjoy using a place value chart to round off numbers up to the nearest millions
 | Learners are guided in pairs, in groups or individually to: Identify the place value of different numbers in millions Round off numbers up to the nearest hundreds of thousandsRound off numbers up to the nearest millions Work out practice exercise 5 | Can you round off 876 943 to the nearest hundreds of thousands?  | Place value apparatus Number charts Numbercards **References*****Mentor Mathematics Learner’s Book Grade 7 pg. 9-10*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 2 | 1 | ***NUMBERS***  | Whole Numbers Rounding off numbers up to the nearest hundreds of millions  | By the end of the lesson, the learner should be able to:1. Round off numbers up to the nearest hundreds of millions
2. Prepare and use place value charts to round off numbers up to the nearest hundreds of millions
3. Apply operations of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Round off numbers up to the nearest hundreds of millions Prepare and use place value charts to round off numbers up to the nearest hundreds of millionsWork out practise exercise 6 | The digit in which place value do we consider when rounding off numbers to the nearest ten thousand hundreds of millions? | Place value apparatus Number charts s Multiplication tables**References** ***Mentor Mathematics Learner’s Book Grade 7 pg. 10-12*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Whole Numbers Natural numbers Odd and even numbers  | By the end of the lesson, the learner should be able to:1. Count and write the number of items using natural numbers
2. Make number cards and use them to classify natural numbers as even and odd numbers
3. Appreciate use of natural numbers in real life situation
 | Learners are guided in pairs, in groups or individually to: Count and write the number of items in the classroom using natural numbers Arrange the number of items counted from the largest to the smallestMake number cards and use them to classify natural numbers as even and odd numbers Work out practice exercise 7 | Which numbers are divisible by 2 without a remainder?  | Place value apparatus Number charts Numbercards Multiplication tables**References** ***Mentor Mathematics Learner’s Book Grade 7 pg. 12-13*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Whole Numbers Prime numbers  | By the end of the lesson, the learner should be able to:1. Write down numbers 1 to 100 on a chart
2. Use the chart to classify natural numbers as prime numbers in the chart
3. Enjoy sharing their work with other groups
 | Learners are guided in pairs, in groups or individually to: Write down numbers 1 to 100 on a chart Use the chart to classify natural numbers as prime numbers in the chart Work out practise exercise 8 | Which numbers have exactly two factors? | Place value apparatus Number charts Numbercards **References** ***Mentor Mathematics Learner’s Book Grade 7 pg. 14-15*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Whole Numbers Operations on whole numbers Combined operations (1) | By the end of the lesson, the learner should be able to:1. Explain how to perform a combined operation involving addition and subtraction of different numbers
2. Perform combined operations involving addition and subtraction in the correct order
3. Apply operations of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to perform a combined operation involving addition and subtraction of different numbersPerform combined operations involving addition and subtraction in the correct order Work out practice exercise 9 | Can you find the solution to 326-540+431?  | Place value apparatus Number charts Numbercards Multiplication tables**References*****Mentor Mathematics Learner’s Book Grade 7 pg. 16-17*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Whole Numbers Operations on whole numbers Combined operations (2) | By the end of the lesson, the learner should be able to:1. Explain how to perform a combined operation involving division and multiplication of different numbers
2. Perform combined operations involving division and multiplication in the correct order
3. Apply operations of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to perform a combined operation involving division and multiplication of different numbersPerform combined operations involving division and multiplication in the correct order Work out practice exercise 10 | What is the solution to 16÷8×156?  | Place value apparatus Number charts Numbercards Multiplication tables**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 17-18*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 3 | 1 | ***NUMBERS***  | Whole Numbers Operations on whole numbers Combined operations (3) | By the end of the lesson, the learner should be able to:1. Explain how to perform a combined operation involving division, multiplication, addition and subtraction of different numbers
2. Perform combined operation involving division, multiplication, addition and subtraction in the correct order
3. Apply operations of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to perform a combined operation involving division, multiplication, addition and subtraction of different numbersCopy and fill in the puzzle and use a calculator to confirm the answersPerform combined operation involving division, multiplication, addition and subtraction in the correct orderWork out practise exercise 11 | What is the answer to 528-84÷7×9+10?  | Place value apparatus Number charts Numbercards Multiplication tables**References** ***Mentor Mathematics Learner’s Book Grade 7 pg. 19-20*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Whole Numbers Number sequence | By the end of the lesson, the learner should be able to:1. Identify the number patterns to work out number sequences
2. Work out number sequence of different number patterns
3. Appreciate use of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Identify the number patterns to work out number sequencesWork out number sequence of different number patterns Work out practice exercise 12 | What is a number sequence? Can you give examples?  | Number chartsMultiplication Tables**References** ***Mentor Mathematics Learner’s Book Grade 7 pg. 21-22*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Whole Numbers Creating number sequence | By the end of the lesson, the learner should be able to:1. Create number sequence for playing number games
2. Use digital devices to play games involving place value
3. Appreciate use of whole numbers in real life situations
 | Learners are guided in pairs, in groups or individually to: Create number sequence for playing number gamesUse digital devices to play games involving place value Work out practice exercise 13 | Can you create 5 patterns that involve multiplication?  | Place value apparatus Number charts Multiplication Tables**REFERENCES*****Mentor Mathematics Learner’s Book Grade 7 pg. 22-23*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Factors Divisibility test rules  | By the end of the lesson, the learner should be able to:1. Determine divisibility of numbers using flash cards
2. Test divisibility of numbers by 2, 3, 4, 5, 6, 8, 9,10 and 11 in different situations
3. Reflect on use of factors in real life situations
 | Learners are guided in pairs, in groups or individually to: Determine divisibility of numbers using flash cards Test divisibility of numbers by 2, 3, 4, 5, 6, 8, 9,10 and 11 in different situationsCreate a song or poem on divisibility test of numbers  | Where do we use factors in day-to-day activities? Which numbers are divisible by 2 and 10?  | Multiplication Tables **REFERENCES*****Mentor Mathematics Learner’s Book Grade 7 pg. 24-26*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Factors Composite numbers  | By the end of the lesson, the learner should be able to:1. Express composite numbers as a product of prime factors in different situations
2. Write factors of composite numbers by factorization, factor tree, factor rainbow in charts, colour charts or cards using locally available materials
3. Reflect on use of factors in real life situations
 | Learners are guided in pairs, in groups or individually to: Express composite numbers as a product of prime factors in different situationsWrite factors of composite numbers by factorization, factor tree, factor rainbow in charts, colour charts or cards using locally available materials | What is a composite number? Can you give examples?  | Multiplication Tables**REFERENCES****Mentor Mathematics Learner’s Book Grade 7 pg. 27-28** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 4 | 1 | ***NUMBERS***  | Factors Greatest Common Divisor (GCD) | By the end of the lesson, the learner should be able to:1. Work out the Greatest Common Divisor (GCD) of numbers by factor method in different situation
2. Use factors to determine the GCD using number cards
3. Apply the Greatest Common Divisor (GCD) in real life situations
 | Learners are guided in pairs, in groups or individually to: Work out the Greatest Common Divisor (GCD) of numbers by factor method in different situationUse factors to determine the GCD using number cards Work out practice exercise 3 | How do we use factors in day-to-day activities? What is the GCD of 12 and 16?  | Multiplication Tables**REFERENCES*****Mentor Mathematics Learner’s Book Grade 7 pg. 28-29*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Factors Least Common Divisor (LCM) | By the end of the lesson, the learner should be able to:1. Work out the Least Common Multiples (LCM) of numbers by factor method in different situation
2. Use factors to determine the LCM using number cards
3. Apply the Least Common Multiples (LCM) in real life situations
 | Learners are guided in pairs, in groups or individually to: Work out the Least Common Multiples (LCM) of numbers by factor method in different situationUse factors to determine the LCM using number cards Work out practice exercise 4 | What is the LCM of 8 and 20?  | Mentor Mathematics Learner’s Book Grade 7 pg. 30Multiplication tables | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Factors Application of Greatest Common Divisor (GCD) and Least Common Divisor (LCM) | By the end of the lesson, the learner should be able to:1. Work out application questions and solve problems relating to the GCD and the LCM in real life situations.
2. Determine the GCD and LCM of numbers using IT to perform exercises on factors such as games
3. Reflect on use of factors in real life situations
 | Learners are guided in pairs, in groups or individually to: Work out application questions and solve problems relating to the GCD and the LCM in real life situations. Determine the GCD and LCM of numbers using IT to perform exercises on factors such as gamesWork out practice exercise 5  | How do we apply the GCD and the LCM in day-to-day activities? | Multiplication Tables**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 31-32** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Fractions Comparing fractions  | By the end of the lesson, the learner should be able to:1. Discuss and arrange fractions in increasing and decreasing order using different strategies
2. Compare fractions in different situations
3. Recognize use of fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Discuss and arrange fractions in increasing and decreasing order using different strategiesCompare fractions in different situationsWork out practice exercise 1 | How do we use fractions in daily activities? | Multiplication Tables**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 33-34*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Fractions Addition of fractions  | By the end of the lesson, the learner should be able to:1. Explain how to add fractions in practice cards
2. Add fractions in different situations
3. Appreciate the use of fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to add fractions in practice cardsAdd fractions in different situationsWork out practice exercise 2 | What is the sum of 1/6 + 2/7?  | Multiplication Tables**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 34-36*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 5 | 1 | ***NUMBERS***  | Fractions Subtraction of fractions  | By the end of the lesson, the learner should be able to:1. Explain how to subtract fractions in practice cards
2. Subtract fractions in different situations
3. Appreciate the use of fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to subtract fractions in practice cardsSubtract fractions in different situationsWork out practice exercise 3 | What is the difference of 1/4 -3/16?  | Multiplication Tables**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 36-38*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Fractions Multiplication of fractions by a whole number  | By the end of the lesson, the learner should be able to:1. Make circular cut outs and use them to multiply fractions by whole numbers
2. Multiply fractions by a whole number in real life situations
3. Appreciate the use of fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Make circular cut outs and use them to multiply fractions by whole numbersMultiply fractions by a whole number in real life situationsWork out practice exercise 4 | What is the product of 3/8 ×7?  | Multiplication Tables**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 38-40*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Fractions Multiplication of a fraction by a fraction  | By the end of the lesson, the learner should be able to:1. Explain how to multiply fractions by fractions using rectangular grids
2. Multiply fractions by a fraction in real life situations
3. Apply fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to multiply fractions by fractions using in gridsMultiply fractions by a fraction in real life situationsWork out practice exercise 5 | What is the solution to 1/10 × 4/9?  | Multiplication Tables**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 40-41*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Fractions Multiplication of a fraction by a mixed number  | By the end of the lesson, the learner should be able to:1. Explain how to multiply a fraction by a mixed number using practice cards
2. Multiply fractions by a mixed number in real life situations
3. Apply multiplication fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to multiply a fraction by a mixed number using practice cardsMultiply fractions by a mixed number in real life situationsWork out practice exercise 6 | What is the product of 1/12 and 4,1/16?  | Multiplication Tables**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 41-42*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Fractions Reciprocals  | By the end of the lesson, the learner should be able to:1. Use flip cards to match fractions and discuss reciprocals
2. Find the reciprocals of fractions in different situations
3. Enjoy finding the reciprocal of fractions
 | Learners are guided in pairs, in groups or individually to: Use flip cards to match fractions and discuss reciprocalsFind the reciprocals of fractions in different situationsWork out practice exercise 7  | What is the reciprocal of 2/3?  | Mentor Multiplication Tables**REFERENCE**Mathematics Learner’s Book Grade 7 pg. 42-43 | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 6 | 1 | ***NUMBERS***  | Fractions Division of a fraction by a whole number  | By the end of the lesson, the learner should be able to:1. Draw a rectangular grid and explain how to use it to divide fractions by whole numbers
2. Divide fractions by a whole number in real life situations
3. Appreciate the use of fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Draw a rectangular grid and explain how to use it to divide fractions by whole numbersDivide fractions by a whole number in real life situationsWork out practice exercise 8 | What is 2/3÷5?  | Mentor Mathematics Learner’s Book Grade 7 pg. 44-45Multiplication Tables**REFERENCE** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Fractions Division of a fraction by a fraction  | By the end of the lesson, the learner should be able to:1. Explain how to divide fractions by fractions using practice cards
2. Divide fractions by fractions in real life situations
3. Apply fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to divide fractions by fractions using practice cardsDivide fractions by fractions in real life situationsWork out practice exercise 9 | What is 2/15 divided by 2/5?  | Mentor Mathematics Learner’s Book Grade 7 pg. 45-46Multiplication Tables**REFERENCE** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Fractions Division of a fraction by a mixed fraction | By the end of the lesson, the learner should be able to:1. Explain how to divide a fraction by a mixed fraction using number cards
2. Divide fractions by mixed fractions in real life situations
3. Apply division fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to divide a fraction by a mixed fraction using number cardsDivide fractions by mixed fractions in real life situationsWork out practice exercise 10 | What is 7/8 by 6¼?  | Mentor Mathematics Learner’s Book Grade 7 pg. 46-47Multiplication Tables**REFERENCE** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Fractions Division of a whole number by a fraction  | By the end of the lesson, the learner should be able to:1. Explain how to divide a whole number by a fraction
2. Divide whole numbers by fractions in real life situations
3. Appreciate division of fractions
 | Learners are guided in pairs, in groups or individually to: Explain how to divide a whole number by a fractionDivide whole numbers by fractions in real life situations Work out practice exercise 11 | Mathematics lessons take 2/3 hours. How many lessons are there in 12 hours?  | Mentor Mathematics Learner’s Book Grade 7 pg. 47-48Multiplication Tables**REFERENCE** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Fractions Number sequence involving fractions  | By the end of the lesson, the learner should be able to:1. Identify number sequence involving fractions in different situations
2. Find the next fractions in different number sequences
3. Recognize use of fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Identify number sequence involving fractions in different situationsFind the next fractions in different number sequences Work out practise exercise 12 | What is 1¼ converted to improper fractions?  | Mentor Mathematics Learner’s Book Grade 7 pg. 49-50Multiplication tables**REFERENCE** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 7 |  |  |  | **MIDTERM BREAK** | **MIDTERM BREAK** | **MIDTERM BREAK** |  |  |
| 8 | 1 | ***NUMBERS***  | Fractions Creating number sequence involving fractions | By the end of the lesson, the learner should be able to:1. Identify the rule in various number sequences
2. Create number sequence involving fractions for playing number games using digital devices
3. Apply fractions in real life situations
 | Learners are guided in pairs, in groups or individually to: Identify the rule in various number sequences Create number sequence involving fractions for playing number games using digital devicesWork out practice exercise 13 | Where do we use fractions in daily activities? | Multiplication tablesDigital devices**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 50-51*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Decimals Place value of decimals | By the end of the lesson, the learner should be able to:1. Identify the place value of digits in decimals numbers
2. Find the place value of digits in decimal numbers using place value charts
3. Recognize use of decimals in real life situations
 | Learners are guided in pairs, in groups or individually to: Identify the place value of digits in decimals numbersFind the place value of digits in decimal numbers using place value chartsWork out practise exercise 1  | Where are decimals applicable in real life?   | Equivalent fraction boardCircular and rectangular cut outsCounters**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 52-54** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Decimals Total value of decimals  | By the end of the lesson, the learner should be able to:1. Identify the total value of digits in decimal numbers
2. Find the total value of digits in decimal numbers using number cards
3. Appreciate the use of decimals in real life situations
 | Learners are guided in pairs, in groups or individually to: Identify the total value of digits in decimal numbers Find the total value of digits in decimal numbers using number cards Work out practice exercise 2 | What is the total value of 5 in the number 0.6251?   | Equivalent fraction boardCircular and rectangular cut outsCounters**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 54-55*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Decimals Multiplication of decimals by a whole number  | By the end of the lesson, the learner should be able to:1. Discuss how to multiply decimals by whole numbers
2. Multiply decimals by whole numbers using multiplication charts
3. Recognize use of decimals in real life situations.
 | Learners are guided in pairs, in groups or individually to: Discuss how to multiply decimals by whole numbersMultiply decimals by whole numbers using multiplication charts Work out practice exercise 3 | What is the solution to 0.8×2?   | Equivalent fraction boardCircular and rectangular cut outs**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 55-57*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Decimals Multiplication of a decimal by a decimal  | By the end of the lesson, the learner should be able to:1. Explain how to multiply a decimal by a decimal
2. Multiply decimals by decimals using square grids
3. Recognize use of decimals in real life situations.
 | Learners are guided in pairs, in groups or individually to: Explain how to multiply a decimal by a decimalMultiply decimals by decimals using square grids Work out practice exercise 4 | What is the area of a square field whose one side measures 31.62 metres?   | Equivalent fraction boardCircular and rectangular cut outs**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 57-58*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 9 | 1 | ***NUMBERS***  | Decimals Division of a decimal by a whole number  | By the end of the lesson, the learner should be able to:1. Explain how to divide a decimal by a whole number
2. Divide decimals by whole numbers using calculators
3. Enjoy dividing decimals by whole numbers
 | Learners are guided in pairs, in groups or individually to: Explain how to divide a decimal by a whole numberDivide decimals by whole numbers using calculators Use IT devices to watch out operations involving decimals | The total height of six girls is 9.78 metres. What is the height of each girl?   | Equivalent fraction boardCircular and rectangular cut outs**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 58-59*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Decimals Division of a decimal by a decimal  | By the end of the lesson, the learner should be able to:1. Explain how to divide a decimal by a decimal
2. Divide decimals by decimals using conversation
3. Appreciate the use of decimals in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to divide a decimal by a decimal Divide decimals by decimals using conversation Work out practice exercise 6 | How many times is the value of digit 2 greater than the value of digit 4 in the number 3.26784?   | Circular and rectangular cut outsCounters**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 60*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Squares and square roots Squares of whole numbers  | By the end of the lesson, the learner should be able to:1. Identify squares of whole numbers
2. Work out squares of whole numbers using grids and charts
3. Appreciate use of squares in real life situations
 | Learners are guided in pairs, in groups or individually to: Identify squares of whole numbers Work out squares of whole numbers using grids and chartsWork out practice exercise 1  | What is the sum of the squares of 12 and 16?   | Place value chartsNumber cards**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 61-62*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***NUMBERS***  | Squares and square roots Squares of fractions  | By the end of the lesson, the learner should be able to:1. Determine the squares of fractions in different situations
2. Work out squares of fractions using grids and calculators
3. Appreciate use of squares in real life situations
 | Learners are guided in pairs, in groups or individually to: Determine the squares of fractions in different situations Work out squares of fractions using grids and calculators Work out practice exercise 2 | What is the sum of the squares of 2,1/2 and 4, ¼?   | Place value chartsNumber cards**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 63-64*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***NUMBERS***  | Squares and square roots Squares of decimals  | By the end of the lesson, the learner should be able to:1. Determine the squares of decimals by multiplication
2. Work out squares of decimals using long multiplication method in different situations
3. Appreciate use of squares in real life situations
 | Learners are guided in pairs, in groups or individually to: Determine the squares of decimals by multiplication Work out square of decimals using long multiplication method in different situationsWork out practice exercise 3 | Where do we apply squares and square roots in daily activities?    | Place value chartsNumber cards**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 64-65*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 10 | 1 | ***NUMBERS***  | Squares and square roots Square root of whole numbers  | By the end of the lesson, the learner should be able to:1. Determine the square roots of whole numbers
2. Find the square root of whole numbers using factorization method in different situations
3. Appreciate use of squares roots in real life situations
 | Learners are guided in pairs, in groups or individually to: Match each number with the correct square rootDetermine the square roots of whole numbersFind the square root of whole numbers using factorization methodWork out practice exercise 4 | How do we apply squares and square roots in daily activities?  | Place value chartsNumber cards**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 66-67*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***NUMBERS***  | Squares and square roots Square root of fractions  | By the end of the lesson, the learner should be able to:1. Determine the square roots of fractions
2. Work out the square root of fractions using division method in different situations
3. Appreciate use of squares roots in real life situations
 | Learners are guided in pairs, in groups or individually to: Determine the square roots of fractions Work out the square root of fractions using division method in different situationsWork out practice exercise 5 | A square mat has an area of 5,1/16 metre squared. What is the length of its sides in metres?   | Place value chartsNumber cards**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 68-69*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***NUMBERS***  | Squares and square roots Square root of decimals  | By the end of the lesson, the learner should be able to:1. Explain how to find the square root of decimals using division method
2. Determine the square roots of decimals in different situations using division method
3. Appreciate use of squares and square roots in real life situations
 | Learners are guided in pairs, in groups or individually to: Explain how to find the square root of decimals using division method Determine the square roots of decimals in different situations using division method Work out practice exercise 6 | What is the square root of 0.64?   | Place value chartsNumber cards**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 69-70*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***ALGEBRA*** | Algebraic expressions Forming algebraic expressions  | By the end of the lesson, the learner should be able to:1. Discuss and classify objects in their immediate environment according to similarities or differences
2. Form algebraic expressions from real life situations
3. Appreciate use of algebraic expressions in real life
 | Learners are guided in pairs, in groups or individually to: Discuss and classify objects in their immediate environment according to similarities or differencesForm algebraic expressions from real life situationsWork out practice exercise 1 | Kelvin had **x** books, Eunice has **y** books and Jossy has **z** books. How many books do they have altogether?  | Place value chartsNumber cards**REFERENCE*****Mentor Mathematics Learner’s Book Grade 7 pg. 71-72*** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***ALGEBRA*** | Algebraic expressions Forming algebraic expressions from algebraic statements  | By the end of the lesson, the learner should be able to:1. Discuss how to form algebraic expressions from the classified objects
2. Read and interpret algebraic statements to form algebraic expressions
3. Appreciate use of algebraic expressions in real life
 | Learners are guided in pairs, in groups or individually to: Discuss how to form algebraic expressions from the classified objects Read and interpret algebraic statements to form algebraic expressionsWork out practice exercise 2  | What is algebraic expression to: **b** added to twice **b** and the result multiplied by 7?  | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 72-73** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 11 | 1 | ***ALGEBRA*** | Algebraic expressions Simplifying algebraic expressions (1) | By the end of the lesson, the learner should be able to:1. Discuss how to simplify algebraic expressions from the classified objects
2. Simplify algebraic expressions in real life situations
3. Appreciate use of algebraic expressions in real life
 | Learners are guided in pairs, in groups or individually to: Discuss how to simplify algebraic expressions from the classified objectsSimplify algebraic expressions in real life situationsWork out practice exercise 3 | What is the solution to 2**p** + 5**p** + 6**p**? | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 74-75** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***ALGEBRA*** | Algebraic expressions Simplifying algebraic expressions (1) | By the end of the lesson, the learner should be able to:1. Discuss how to simplify algebraic expressions using number cards
2. Simplify algebraic expressions in real life situations
3. Appreciate use of algebraic expressions in real life
 | Learners are guided in pairs, in groups or individually to: Discuss how to simplify algebraic expressions using number cardsSimplify algebraic expressions in real life situationsWork out practice exercise 4 | Can you simplify the expression: 5(3**a**) + 2**a**?  | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 76-77** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***ALGEBRA*** | Linear equations Forming linear equations  | By the end of the lesson, the learner should be able to:1. Role play activities involving equations with one unknown for example weighing using beam balance and shopping activities
2. Form linear equations in one unknown in different situations
3. Apply linear equations in one unknown to real life situations
 | Learners are guided in pairs, in groups or individually to: Role play activities involving equations with one unknown for example weighing using beam balance and shopping activitiesForm linear equations in one unknown in different situationsWork out practice exercise 1 | How do we use linear equations in real life? | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 77-79** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***ALGEBRA*** | Linear equations Solving linear equations (1) | By the end of the lesson, the learner should be able to:1. Discuss how to form and solve linear equations generated from role play activities
2. Solve linear equations in one unknown in different situations
3. Reflect on use of linear equations in real life situations
 | Learners are guided in pairs, in groups or individually to: Discuss how to form and solve linear equations generated from role play activitiesSolve linear equations in one unknown in different situationsWork out practice exercise 2 | What is **p** + 4 = 10? | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 79-81** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***ALGEBRA*** | Linear equations Solving linear equations (2) | By the end of the lesson, the learner should be able to:1. Discuss how to form and solve linear equations generated from role play activities
2. Solve linear equations in one unknown in different situations
3. Reflect on use of linear equations in real life situations
 | Learners are guided in pairs, in groups or individually to: Discuss how to form and solve linear equations generated from role play activitiesSolve linear equations in one unknown in different situationsWork out practice exercise 3 | What is 3 (m + 5) = 21?  | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 81-82** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 12 | 1 | ***ALGEBRA*** | Linear equations Application of linear equations  | By the end of the lesson, the learner should be able to:1. Apply linear equations in one unknown to real life situations
2. Use IT to form and solve linear equations
3. Reflect on use of linear equations in real life situations
 | Learners are guided in pairs, in groups or individually to: Apply linear equations in one unknown to real life situationsUse IT to form and solve linear equationsWork out practice exercise 4 | The sum of two consecutive numbers is 104. What are the numbers?  | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 82-83** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 2 | ***ALGEBRA*** | Linear inequalities Application of linear inequality symbols  | By the end of the lesson, the learner should be able to:1. Use inequality cards to complete simple inequality statements
2. Apply inequality symbols to inequality statements in learning situations
3. Appreciate use of linear inequalities in real life
 | Learners are guided in pairs, in groups or individually to: Use inequality cards to complete simple inequality statementsApply inequality symbols to inequality statements in learning situationsWork out practice exercise 1 | What is an inequality? Why do we use linear equations in real life? | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 84-85** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 3 | ***ALGEBRA*** | Linear inequalities Forming simple linear inequalities | By the end of the lesson, the learner should be able to:1. Use inequality cards to form simple linear inequalities with one unknown
2. Form simple linear inequalities in one unknown in different situations
3. Enjoy forming simple linear inequalities
 | Learners are guided in pairs, in groups or individually to: Use inequality cards to form simple linear inequalities with one unknownForm simple linear inequalities in one unknown in different situationsWork out practice exercise 2 | Can you form an inequality from this statement: a jerrican holds at most 20 litres of water?  | Place value chartsNumber cards**Mentor Mathematics Learner’s Book Grade 7 pg. 86-87** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 4 | ***ALGEBRA*** | Linear inequalities Illustrating simple inequalities on a number line | By the end of the lesson, the learner should be able to:1. Represent simple inequality statements on a number line
2. Illustrate by drawing simple inequalities on a number line
3. Appreciate use of linear inequalities in real life.
 | Learners are guided in pairs, in groups or individually to: Represent simple inequality statements on a number lineIllustrate by drawing simple inequalities on a number lineWork out practice exercise 3 | Why do we use linear inequalities in real life? | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 87-89** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
|  | 5 | ***ALGEBRA*** | Linear inequalities Forming compound inequality statements  | By the end of the lesson, the learner should be able to:1. Use inequality cards to complete compound inequality statements
2. Illustrate by drawing compound inequalities in one unknown on a number line
3. Appreciate use of linear inequalities in real life.
 | Learners are guided in pairs, in groups or individually to: Use inequality cards to complete compound inequality statementsIllustrate by drawing compound inequalities in one unknown on a number lineWork out practice exercise 4 | How can you write linear inequality x > 2 and x < 6 in compound inequality?  | Place value chartsNumber cards**REFERENCE****Mentor Mathematics Learner’s Book Grade 7 pg. 90-91** | Class activitiesClass written testsOut of school/ home assignments or activities |  |
| 13 |  |  |  | **END OF TERM EXAMINATION** |  |  |  |