**GRADE 7 MATHEMATICS LESSONS PLANS TERM 1**

**WEEK 1**

**LESSON: 1**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Place value**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Identify the place value of different digits on a place value chart
* Use a place value chart to show the place value of different digits
* Appreciate the place value chart in showing the place value of whole numbers

**KEY INQUIRY QUESTION(S):** What is the place value of digit 1 in each number?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Identify the place value of different digits on a place value chart.  **CONCEPT DEVELOPMENT**  Use a place value chart to show the place value of different digits  Use the abacus to show the place value of digit 2 in the number  Work out practice exercise 1.  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 1**

**LESSON: 2**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Total value**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Identify the total value of various digits
* Make number cards and use them to identifying the total value of digits in a place value chart
* Appreciate the use of number cards to identify the total value of digits on a place value chart

**KEY INQUIRY QUESTION(S):** What is the total value of each digit in the numbers 35708462?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Identify the total value of various digits  **CONCEPT DEVELOPMENT**  Make 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 practice exercise 2  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 1**

**LESSON: 3-4**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Reading and writing numbers in symbols**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Read and write numbers in symbols
* Practice writing dummy cheques for different sums of money
* Apply operations of whole numbers in real life situations

**KEY INQUIRY QUESTION(S):** Can you give examples of numbers in symbols?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Read and write numbers in symbols  **CONCEPT DEVELOPMENT**  Make 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 practice exercise 2  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 1**

**LESSON: 5**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Rounding off numbers up to the nearest millions**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Identify the place value of different numbers in millions
* Round off numbers up to the nearest millions
* Enjoy using a place value chart to round off numbers up to the nearest millions

**KEY INQUIRY QUESTION(S):** Can you round off 876 943 to the nearest hundreds of thousands?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Read and write numbers in symbols  **CONCEPT DEVELOPMENT**  Identify the place value of different numbers in millions  Round off numbers up to the nearest hundreds of thousands  Round off numbers up to the nearest millions  Work out practice exercise 5  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 2**

**LESSON: 1**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Rounding off numbers up to the nearest millions**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able 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 millions
* Apply operations of whole numbers in real life situations

**KEY INQUIRY QUESTION(S):** The digit in which place value do we consider when rounding off numbers to the nearest ten thousand hundreds of millions?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Round off numbers up to the nearest hundreds of millions  **CONCEPT DEVELOPMENT**  Prepare and use place value charts to round off numbers up to the nearest hundreds of millions  Work out practice exercise 6.  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 2**

**LESSON: 2**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Natural numbers**

**Odd and even numbers**

**SPECIFIC OUTCOME:** 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.

**KEY INQUIRY QUESTION(S):** Which numbers are divisible by 2 without a remainder?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Count and write the number of items in the classroom using natural numbers  **CONCEPT DEVELOPMENT**  Arrange the number of items counted from the largest to the smallest  Make number cards and use them to classify natural numbers as even and odd numbers  Work out practice exercise 7  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 2**

**LESSON: 3**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Prime numbers**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Write down numbers 1 to 100 on a chart
* Use the chart to classify natural numbers as prime numbers in the chart
* Enjoy sharing their work with other groups

**KEY INQUIRY QUESTION(S):** Which numbers have exactly two factors?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Count and write the number of items in the classroom using natural numbers  **CONCEPT DEVELOPMENT**  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  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 2**

**LESSON: 4**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Operations on whole numbers**

**Combined operations (1)**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

**KEY INQUIRY QUESTION(S):** Which numbers have exactly two factors?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Count and write the number of items in the classroom using natural numbers  **CONCEPT DEVELOPMENT**   * Explain how to perform a combined operation involving addition and subtraction of different numbers * Perform combined operations involving addition and subtraction in the correct order * Apply operations of whole numbers in real life situations   **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 2**

**LESSON: 5**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Operations on whole numbers**

**Combined operations (1)**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

**KEY INQUIRY QUESTION(S):** Which numbers have exactly two factors?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Count and write the number of items in the classroom using natural numbers  **CONCEPT DEVELOPMENT**   * Explain how to perform a combined operation involving addition and subtraction of different numbers * Perform combined operations involving addition and subtraction in the correct order * Apply operations of whole numbers in real life situations   **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 3**

**LESSON: 4**

**STRAND: NUMBERS**

**SUB-STRAND: Whole Numbers, Operations on whole numbers**

**Combined operations (1)**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Explain how to perform a combined operation involving division, multiplication, addition and subtraction of different numbers
* Perform combined operation involving division, multiplication, addition and subtraction in the correct order
* Apply operations of whole numbers in real life situations

**KEY INQUIRY QUESTION(S):** Which numbers have exactly two factors?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Count and write the number of items in the classroom using natural numbers  **CONCEPT DEVELOPMENT**   * Explain how to perform a combined operation involving addition and subtraction of different numbers * Perform combined operations involving addition and subtraction in the correct order * Apply operations of whole numbers in real life situations   **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to find place values of various digits.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 3**

**LESSON: 5**

**STRAND: NUMBERS**

**SUB-STRAND: Factors, Composite numbers**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Express composite numbers as a product of prime factors in different situations
* Write factors of composite numbers by factorization, factor tree, factor rainbow in charts, colour charts or cards using locally available materials
* Reflect on use of factors in real life situations

**KEY INQUIRY QUESTION(S):** What is a composite number?

Can you give examples?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Express composite numbers as a product of prime factors in different situations  **CONCEPT DEVELOPMENT**  Write factors of composite numbers by factorization, factor tree, factor rainbow in charts, color charts or cards using locally available materials  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations involving place value.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to demonstrate how to do operations involving composite numbers.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 4**

**LESSON: 1**

**STRAND: NUMBERS**

**SUB-STRAND: Factors,** Greatest Common Divisor (GCD)

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Work out the Greatest Common Divisor (GCD) of numbers by factor method in different situation
* Use factors to determine the GCD using number cards
* Apply the Greatest Common Divisor (GCD) in real life situations

**KEY INQUIRY QUESTION(S):** How do we use factors in day-to-day activities?

What is the GCD of 12 and 16?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Work out the Greatest Common Divisor (GCD) of numbers by factor method in different situation  **CONCEPT DEVELOPMENT**  Learners are guided in pairs, in groups or individually to:  Work out the Greatest Common Divisor (GCD) of numbers by factor method in different situation  Use factors to determine the GCD using number cards  Work out practice exercise 3  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of Greatest Common Divisor.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to find Greatest Common Divisors in given exercise.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 4**

**LESSON: 2**

**STRAND: NUMBERS**

**SUB-STRAND: Factors, Least Common Divisor (LCM)**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Work out the Least Common Multiples (LCM) of numbers by factor method in different situation
* Use factors to determine the LCM using number cards
* Apply the Least Common Multiples (LCM) in real life situations.

**KEY INQUIRY QUESTION(S):** What is the LCM of 8 and 20?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Work out the Least Common Multiples (LCM) of numbers by factor method in different situation  **CONCEPT DEVELOPMENT**  Learners are guided in pairs, in groups or individually to:  Work out the Least Common Multiples (LCM) of numbers by factor method in different situation  Use factors to determine the LCM using number cards  Work out practice exercise 4  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to find Least Common Multiples in given exercise.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 4**

**LESSON: 3**

**STRAND: NUMBERS**

**SUB-STRAND: Factors, Application of Greatest Common Divisor (GCD) and Least Common Divisor (LCM)**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able 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 games
* Reflect on use of factors in real life situations

**KEY INQUIRY QUESTION(S):** How do we apply the GCD and the LCM in day-to-day activities?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Work out the Least Common Multiples (LCM) of numbers by factor method in different situation  **CONCEPT DEVELOPMENT**  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 games  Work out practice exercise 5  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to find Least Common Multiples in given exercise.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 4**

**LESSON: 4-5**

**STRAND: NUMBERS**

**SUB-STRAND:** **Fractions**

**Comparing fractions**

**Least Common Divisor (LCM)**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Discuss and arrange fractions in increasing and decreasing order using different strategies
* Compare fractions in different situations
* Recognize use of fractions in real life situations

**KEY INQUIRY QUESTION(S):** How do we use fractions in daily activities?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Work out the Least Common Multiples (LCM) of numbers by factor method in different situation  **CONCEPT DEVELOPMENT**  Learners are guided in pairs, in groups or individually to:  Discuss and arrange fractions in increasing and decreasing order using different strategies  Compare fractions in different situations  Work out practice exercise 1  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to find Least Common Multiples in given exercise.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 5**

**LESSON: 1**

**STRAND: NUMBERS**

**SUB-STRAND:** **Fractions, Subtraction of fractions**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Explain how to subtract fractions in practice cards
* Subtract fractions in different situations
* Appreciate the use of fractions in real life situations

**KEY INQUIRY QUESTION(S):** What is the difference of 1/4 -3/16?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Explain how to subtract fractions in practice cards  Subtract fractions in different situations.  **CONCEPT DEVELOPMENT**  Learners are guided in pairs, in groups or individually to:  Discuss and arrange fractions in increasing and decreasing order using different strategies  Compare fractions in different situations  Work out practice exercise 1  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to find Least Common Multiples in given exercise.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 5**

**LESSON: 2**

**STRAND: NUMBERS**

**SUB-STRAND:** **Fractions, Multiplication of fractions by a whole number.**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Make circular cut outs and use them to multiply fractions by whole numbers
* Multiply fractions by a whole number in real life situations
* Appreciate the use of fractions in real life situations.

**KEY INQUIRY QUESTION(S):** What is the product of 3/8 ×7?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Make circular cut outs and use them to multiply fractions by whole numbers  **CONCEPT DEVELOPMENT**  Learners are guided in pairs, in groups or individually to:  Discuss and arrange fractions in increasing and decreasing order using different strategies  Compare fractions in different situations  Work out practice exercise 1  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving multiplications.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 5**

**LESSON: 3**

**STRAND: NUMBERS**

**SUB-STRAND:** **Fractions, Multiplication of fractions by a whole number.**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Make circular cut outs and use them to multiply fractions by whole numbers
* Multiply fractions by a whole number in real life situations
* Appreciate the use of fractions in real life situations.

**KEY INQUIRY QUESTION(S):** What is the solution to 1/10 × 4/9?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
| --- | --- |
| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Make circular cut outs and use them to multiply fractions by whole numbers  **CONCEPT DEVELOPMENT**  Learners are guided in pairs, in groups or individually to:  Discuss and arrange fractions in increasing and decreasing order using different strategies  Compare fractions in different situations  Work out practice exercise 1  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving multiplications.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 5**

**LESSON: 4-5**

**STRAND: NUMBERS**

**SUB-STRAND:** **Fractions, Reciprocals**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Use flip cards to match fractions and discuss reciprocals
* Find the reciprocals of fractions in different situations
* Enjoy finding the reciprocal of fractions

**KEY INQUIRY QUESTION(S):** What is the reciprocal of 2/3?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

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| --- | --- |
| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Use flip cards to match fractions and discuss reciprocals  **CONCEPT DEVELOPMENT**  Find the reciprocals of fractions in different situations  Work out practice exercise 7  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving multiplications.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 6**

**LESSON: 1**

**STRAND: NUMBERS**

**SUB-STRAND:** **Division of a fraction by a whole number**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Draw a rectangular grid and explain how to use it to divide fractions by whole numbers
* Divide fractions by a whole number in real life situations
* Appreciate the use of fractions in real life situations

**KEY INQUIRY QUESTION(S):** What is 2/3÷5?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
| --- | --- |
| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  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 numbers  **CONCEPT DEVELOPMENT**  Find the reciprocals of fractions in different situations  Divide fractions by a whole number in real life situations  Work out practice exercise 8  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of LCM.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving reciprocals.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 6**

**LESSON: 2-3**

**STRAND: NUMBERS**

**SUB-STRAND:** **Division of a fraction by a mixed fraction**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Explain how to divide a fraction by a mixed fraction using number cards
* Divide fractions by mixed fractions in real life situations
* Apply division fractions in real life situations

**KEY INQUIRY QUESTION(S):** What is 7/8 by 6¼?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
| --- | --- |
| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Explain how to divide a fraction by a mixed fraction using number cards  **CONCEPT DEVELOPMENT**  Explain how to divide a fraction by a mixed fraction using number cards  Divide fractions by mixed fractions in real life situations  Work out practice exercise 10  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of mixed fractions.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving mixed fractions.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 6**

**LESSON: 4**

**STRAND: NUMBERS**

**SUB-STRAND:** **Division of a whole number by a fraction**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Explain how to divide a whole number by a fraction
* Divide whole numbers by fractions in real life situations
* Appreciate division of fractions

**KEY INQUIRY QUESTION(S):** Mathematics lessons take 2/3 hours. How many lessons are there in 12 hours?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
| --- | --- |
| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Explain how to divide a fraction by a mixed fraction using number cards  **CONCEPT DEVELOPMENT**  Explain how to divide a whole number by a fraction  Divide whole numbers by fractions in real life situations  Work out practice exercise 11  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of mixed fractions.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving mixed fractions.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 6**

**LESSON: 5**

**STRAND: NUMBERS**

**SUB-STRAND:** **Number sequence involving fractions**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Identify number sequence involving fractions in different situations
* Find the next fractions in different number sequences
* Recognize use of fractions in real life situations

**KEY INQUIRY QUESTION(S):** What is 1¼ converted to improper fractions?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
| --- | --- |
| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Identify number sequence involving fractions in different situations  **CONCEPT DEVELOPMENT**  Identify number sequence involving fractions in different situations  Find the next fractions in different number sequences  Work out practice exercise 12  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of mixed fractions.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving mixed fractions.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**

**WEEK 7: MIDTERM BREAK**

**WEEK 8**

**LESSON: 5**

**STRAND: NUMBERS**

**SUB-STRAND:** **Number sequence involving fractions**

**SPECIFIC OUTCOME:** By the end of the lesson, the learner should be able to:

* Identify number sequence involving fractions in different situations
* Find the next fractions in different number sequences
* Recognize use of fractions in real life situations

**KEY INQUIRY QUESTION(S):** What is 1¼ converted to improper fractions?

**LEARNING RESOURCES:** Place value apparatus

Number charts Number

cards Multiplication

tables

**References**

***Mentor Mathematics Learner’s Book Grade 7***

**ORGANIZATION OF LERANING: IN CLASSROOM AND GROUP WORK**

|  |  |
| --- | --- |
| **TIME** | **CONTENT** |
| 5 Minutes  25 Minutes  10 Minutes | **INTRODUCTION**  Learners are guided in pairs, in groups or individually to:  Identify number sequence involving fractions in different situations  **CONCEPT DEVELOPMENT**  Identify number sequence involving fractions in different situations  Find the next fractions in different number sequences  Work out practice exercise 12  **Core competence: Critical Thinking, Problem Solving, communication and Collaboration.**  **Conclusion**  Teacher to observe learners understanding on operations of mixed fractions.  **Extended Activities**  Learners to be given assignment to do at home. Written tests graded observation of group work activities ,Self and peer assessment |

**Summary:** In groups Learners to do operations involving mixed fractions.

**Reflection in the lesson/self-remarks: ......................................................................................................................................................................................................................................................................................................................................................................................................................................................................**