**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 3: July – September**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1 Hour |

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| 1. **TOPIC: ALGEBRAIC EQUATIONS**: Number Sentences **(Lesson 1)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should know and be able to write number sentences to describe problem situations** |

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| 1. **RESOURCES:** | DBE workbook 2, Sasol-Inzalo book 2, Textbooks |
| 1. **PRIOR KNOWLEDGE:** | * Basic operations * Number sentences using a place holder * Describing problem situations |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)   Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. | |
| 1. **INTRODUCTION** (Suggested time: 10 Minutes) | |
| Introduce the concept by giving learners a problem situation in words. Learners work in small groups to write problem to a number sentence.  **Example:**  Thando is 21 years old. She is 5 years older than James. How can we find James’ age?   * Let James’ age be * So Thando’s age is years * Then we can find James’ age with the number sentence:   Can the number sentence above be represented in a different way without changing its meaning? | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| Explains the following activities:  We can also write the above number sentence using **letters of alphabets** as placeholders.   * Let James’ age be * So Thando’s age is years * Then we can find James’ age with the number sentence:  |  | | --- | |  |     NOTE:   * The value on the Left Hand Side(LHS) should always be equal to the value on the Right Hand Side(RHS) in a number sentence or equation. * The introduction of letters in a number sentence is called Algebra.   **Divide learners into small groups and guide them as they work through activity.**  **Activity 1**  Change the following statements to number sentences.   1. If I add to a certain number, I get .   Solution:  Let the number   1. The sum of two consecutive numbers is 77.   Solution:  Let the 1st number be  The next number will be     1. What must be multiplied by 2 to give 30?   Solution:  Let the unknown number be   1. What number, when you double it and subtract it from 8 makes 4?   Solution:  Let the number be | * Working in small groups * Write number sentences |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| **Activity**  Write a number sentence using a letter symbol as a placeholder for the unknown number to describe the problem in each of the situations below.   1. There are 35 learners in class. learners are absent and 31 are present. 2. Four times a number decreased by half is equal to five. 3. There are 70 passengers on a bus. At a bus stop passengers get off. There are now 23 passengers on the bus. 4. A pencil costs R(y rand). You buy 4 pencils and a book costing R5. The total cost is R25. 5. Kakgiso works 8 hours per day. How much does he earn per hour if he earns R960 per day? 6. A school charges R100 a day for the use of its training facilities for athletes plus R30 per athlete for food and use of equipment. A team of athletes paid R400 for a day’s practice. Let x be the number of athletes attending the training |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. Emphasise that:    * The value on the Left Hand Side (LHS) should always be equal to the value on the Right Hand Side (RHS) in a number sentence or equation.    * The introduction of letters in a number sentence is called Algebra. 2. Homework   The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the Sasol-Inzalo books, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**:  Write an equation to represent the situation.   1. The sum of two consecutive even numbers is 82. The smaller number is 2. The consumer studies class bakes apple pies and the tuckshop bakes 4 apple pies for a   cake sale. All the pies are cut into 5 pieces. There are 60 pieces of pie altogether.   1. Jabulani thinks of a number . Sihle multiplies this number by 6 and John multiplies it by 3 and adds 9. Sihle and John get the same answer. What number did Jabulani think of? |