**MATHEMATICS LESSON PLAN**

**GRADE 8**

**TERM 2: April – June**

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

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| 1. **TOPIC: ALGEBRAIC EQUATIONS:** Revision of term 1 work **(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:**   * set up equations to describe problem situations. * analyse and interpret equations that describe a given situation. * solve equations by inspection. * determine the numerical value of an expression by substitution. * identify variables and constants in given formulae and equations |

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| 1. **RESOURCES:** | Textbooks, DBE workbook, Sasol-Inzalo book 1 |
| 1. **PRIOR KNOWLEDGE:** | * constants and variables * equations * mathematics terminology: sum, product, quotient, difference, etc. |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (Suggested time: 10 minutes)   Homework provides an opportunity for teachers to track learner’s 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)   **Begin a class discussion on the following questions:**   * What is the difference between an expression and an equation? * Explain how you would find the value of in the following equation * What are you doing when you are looking for the value of the variable that will make an equation true?   **Note:**  The questions are intended to assist the teacher to find out where there are gaps in the learners’ understanding of the work covered in term 1. Use activities below to address the gaps identified. | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| Teaching activities | Learning activities (learners are expected to: ) |
| **Activity**   1. Given the following equations, identify variables and constants: 2. Represent the following number sentences in algebraic equations: 3. A number multiplied by 5 is 50. 4. Add 4 to a number and the answer is 20. 5. Divide a number by 3 and the answer is 9. 6. Rewrite the following algebraic equations using number sentences: 7. Solve the following equations by inspection: 8. Determine the output values by substitution.     6  7  4  5 | complete the activities given by the teacher |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| **Sasol-Inzalo book 1, Page 171**   1. Write equation that represents the given information:   Nandi is years old. Shaba, who is years old, is three years older than Nandi.   1. Solve the following equations for *x*:   (a)  (b)   1. If , what is the value of ? |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) |
| 1. **Emphasise that:**  * to solve equations, you need to perform inverse operations on the equation until you have isolated the variable. * when solving equations perform the same operations to both sides of the equation to keep it balanced. * you can use the method to get the unknown on one side of the equation so that you can conclude that or or …. is equal to a certain number, for example = 3.  1. 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.   **Homework:**   1. Write equations that represent the given information:   The temperature at Colesberg during the day was °C. But at night, the temperature dropped  by 15 degrees to reach −2 °C.   1. Solve the following equations for *x*:   (a)  (b)   1. If and , determine the value of . |